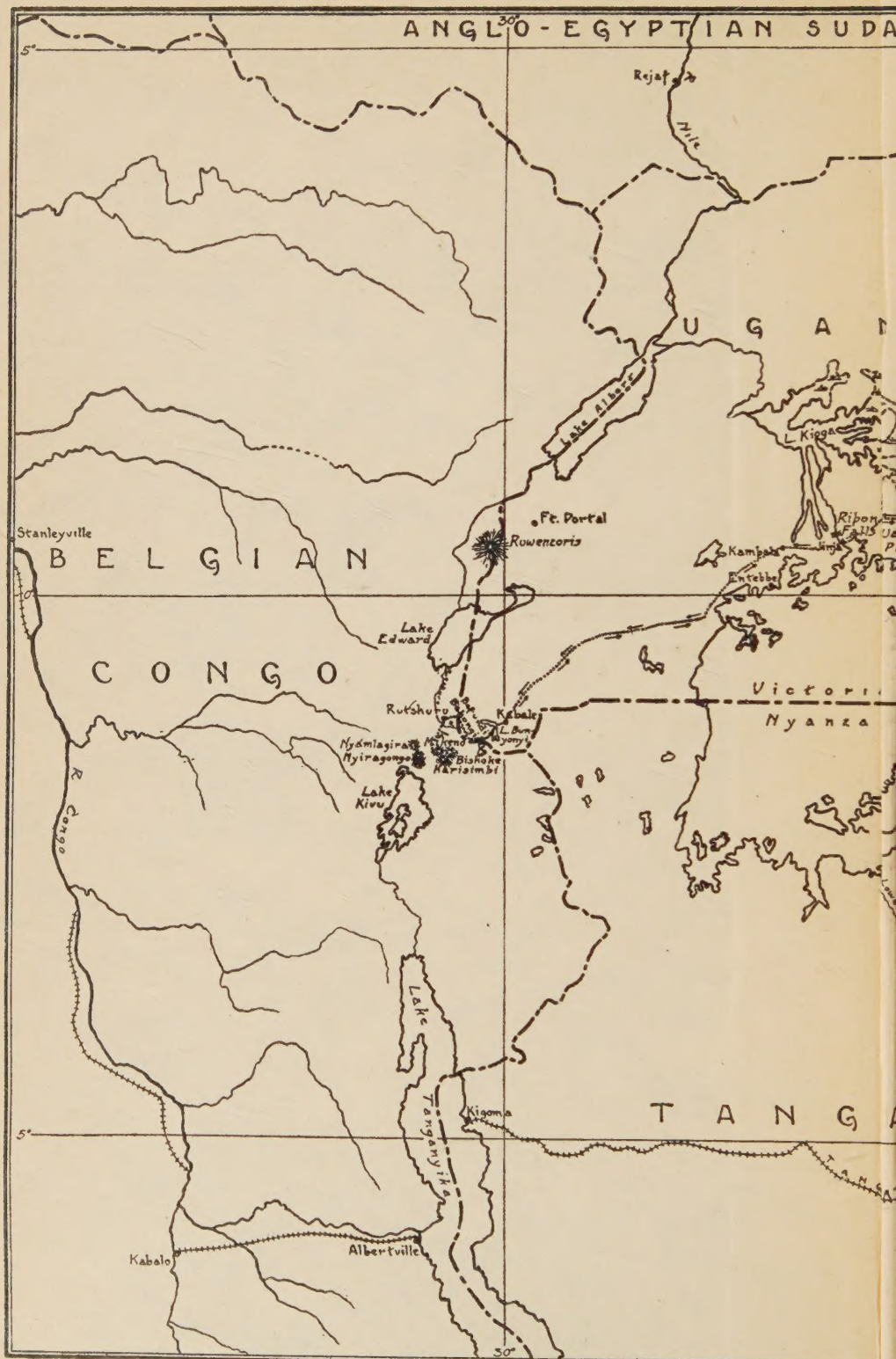


# CARL AKELEY'S AFRICA



MARY L. JOBE AKELEY





MAP OF EQUATORIAL AFRICA SHOWING ROUTES OF FIELD 70



AKELEY-EASTMAN-POMEROY AFRICAN HALL EXPEDITION.



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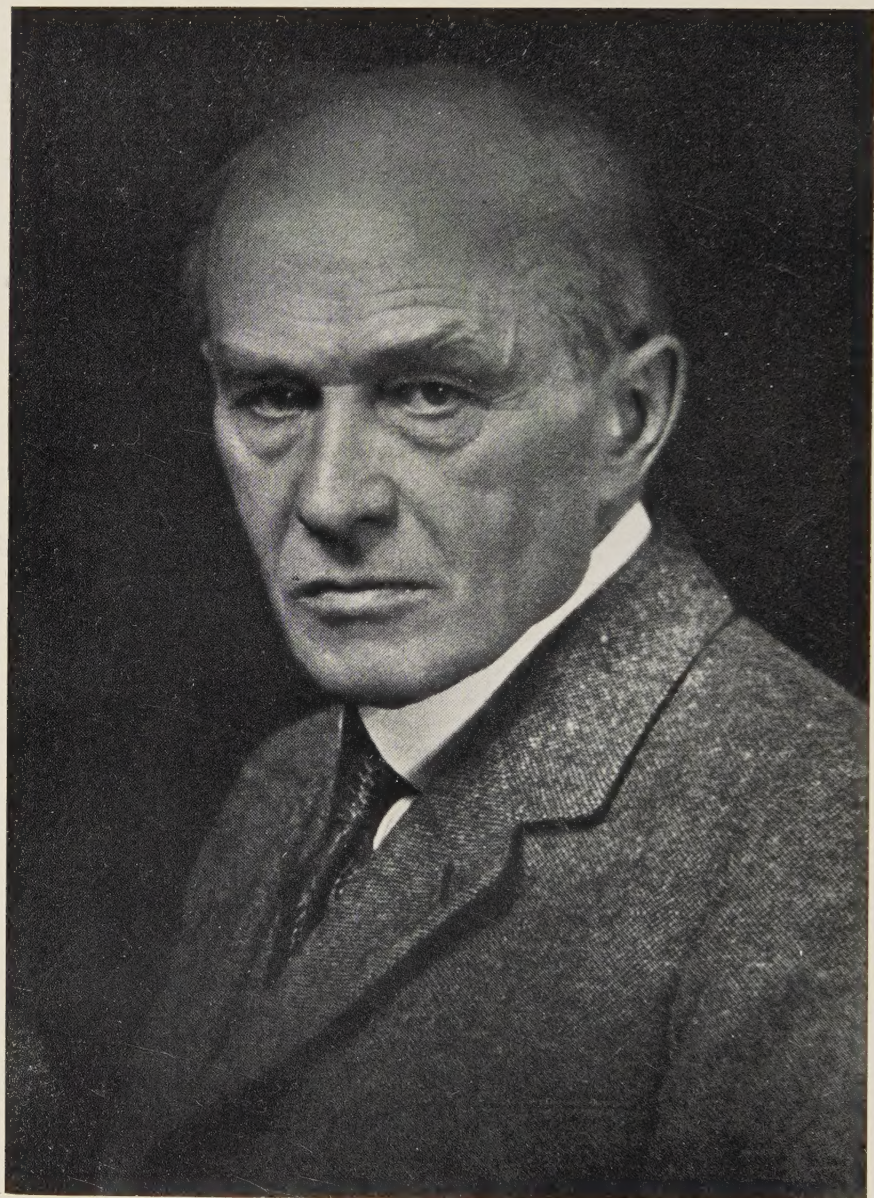
CARL AKELEY'S AFRICA







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CARL AKELEY. HIS LATEST PORTRAIT.

*Photo. by James Henry McKinley.*



# CARL AKELEY'S AFRICA

THE ACCOUNT OF THE AKELEY - EASTMAN -  
POMEROY AFRICAN HALL EXPEDITION OF THE  
AMERICAN MUSEUM OF NATURAL HISTORY

*By*

MARY L. JOBE AKELEY, F.R.G.S.

*Foreword by*

HENRY FAIRFIELD OSBORN

*With Illustrations and Maps*

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TO CARL  
MY HUSBAND, MY COMPANION  
AND  
MY LOYAL FRIEND

"What is excellent,  
As God lives, is permanent;  
Hearts are dust, hearts' loves remain;  
Heart's love will meet thee again."

Emerson's *Tbrenody*

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## FOREWORD

Carl Akeley's friends believe that his name is enrolled in the roster of those who have given to Africa the best they have in them. Of this honorable membership there arises first in every mind such names as those of Speke, explorer of the Nile Valley; Livingstone, intrepid missionary; Stanley, first to cross the continent; Ward, first to ennoble the African native in sculpture; Selous, ideal exponent of sport and adventure; Roosevelt, first explorer of Africa in the spirit of modern zoölogy. These are outstanding names among those who were interested in either the spiritual or the scientific conquest of the Dark Continent, but the name of Akeley is permanently placed on this distinguished roster not because he duplicated either the heroism or the attainments of any of his famous forerunners, but because he entered Africa in an entirely new and different spirit.

Akeley, like Millais, penetrated Africa with the strong spirit of the artist, the sculptor, the lover of the beauty of animal form. Not to picture but to permanently *re-create* these marvels of color, of spirit and of mechanism was the controlling motive of his first journey with Daniel Giraud Elliot in the year 1896. His triumphant re-creation is preserved for all time in the superb Akeley Hall of the Field Museum of Natural History, the great institution which deserves the credit of first recognizing Akeley's genius and affording him the opportunity of his initial survey of African life. However, it is in his conception and work for African Hall of the American Museum of Natural History—a great museum exhibit in which the wild life of the African continent will be truthfully represented in its natural habitat—that Akeley, during a period of seventeen years, made his greatest contribution. This conception and effort for realization he considered the culmination of his life work. The Trustees of the

American Museum of Natural History have recognized Akeley's genius and superb contribution by naming this exhibit the Akeley African Hall.

During the first years of incredible achievement in modeling and mounting these animal groups for Chicago, marking the high-water period of his youthful productiveness, Akeley was also gathering his forces for sculpturing the most imposing living mammal, the African elephant. During this "elephant-group" period of activity, and even before, he had conceived and become enthralled with the still larger plan of representing within the compass of a single large exhibition hall in the American Museum not only the dominant forms of the mammalian life of Africa but also the entrancing scenery and environment. This plan involved repeated journeys to different regions of Africa, accompanied on his last expedition not only by technical assistants but by artists who could fall directly under the spell of Africa's beauty and paint their scenes directly from the life of the desert, veldt and mountain as the actual surrounding and setting of the animal groups of the foreground.

Years of delay, difficulty and disappointment served to enlarge and enhance rather than to diminish this stupendous plan. In this period he completed "The Alarm," the group of four mounted elephants for the American Museum. The World War carried Akeley into national service. The death of Theodore Roosevelt, one of his dearest friends, absorbed him in a titanic lion sculpture designed to be a Roosevelt memorial. Next he collected in the Kivu District, Belgian Congo, the Gorilla Group. Finally at the very darkest hour a splendid group of friends came forward to render possible the representation of *Carl Akeley's Africa*.

During these many years, which lengthened into three decades, Africa more and more took possession of Akeley's soul; he no longer spoke of his return to Africa as going to a strange land, but as going *home*; he became increasingly restive in the artificial civilization of our great city and country and even in the con-

genial studio and surroundings of our Museum. Patriotic as he was to the call of the World War, it was Africa he longed to preserve in the beauty and grandeur of its pre-civilization; it was the African life he not only longed to photograph, paint and model but to conserve; it was in the plains and forests of Africa that he longed to spend the remainder of his life. Like Herbert Ward in his journey through the Congo, he had no eyes for the "darkest Africa" of yore but eyes only for the "brightest Africa" of reality and of his imagination. It was this double impulse of the expression of beauty and tender sentiment for all that remains of the best and noblest creation in Africa which carried him through the alarming loss of strength on his last journey, when, impelled by the undying determination and spirit that characterized his entire life, he finally walked into the shadows of the forests of the Kivu and left his mortal remains in the very land he had longed for.

It is fortunate that his brave wife and comrade was with him during this final expedition and is so ably and sympathetically recording not only the last vanishing wild Africa but the heroic nature lover who gave his life for the great country he loved.

HENRY FAIRFIELD OSBORN

American Museum  
of  
Natural History  
August 16, 1929





## PREFACE

This book is intended to be primarily the story of the high endeavor of a man whom it was my inestimable privilege to know and to love during the all-too-brief space of time allotted to us. Ten months of our two short years together were spent in uninterrupted companionship in Africa. The few years preceding, I had at least glimpsed the borderland of his ideals, his passion for truth and his indomitable spirit. That I came to know these forces of his character intimately in our constant participation in plan and in effort for his achievement, and in the communion of the quiet hours that closed our days, I can only trust. That I, at least a little, have helped him to the ends he sought, I can only steadfastly hope—because that hope is now the sum of life to me.

The narrative of the book, founded on the daily diaries which I kept, is, so far as is humanly possible for me, a faithful representation of fact. Certain disquisitive and descriptive parts have been influenced by the impressions my husband gave me of the great changes time had wrought in the continent and among the wild animals whose friend he was. Other interpretations and descriptions more intimately or wholly mine are based on the impressions I received without bias on this, my *first*, journey to the 'Bright Continent.' I have conceded to myself the right to depict Africa as I saw it and felt it.

In the writing of this book I am constantly mindful of the un-failing understanding of my mother, whose unselfish love and ready Godspeed have made possible every one of my ten journeys in the Canadian Northwest and whose heart interest in my husband's plans was a benediction to our African undertaking.

My initial gratitude is expressed to the sponsors of our expedition—to Mr. George Eastman, Mr. Daniel E. Pomeroy and the late Colonel Daniel B. Wentz, whose generosity made real my

husband's dreams—and to the staff members of our expedition all of whom accomplished important work for African Hall in the field.

My readers will acknowledge with me the great debt of my husband and of myself to those who have 'fathered' or aided and abetted the Parc National Albert; first and foremost to His Majesty, King Albert of the Belgians—to M. Henri Jaspar, Prime Minister of Belgium and Minister of the Colonies—to Baron Emile de Cartier de Marchienne, Belgian Ambassador to the United States, 1917-1927—to Prince Albert de Ligne, present Belgian Ambassador to the United States—to Professor Henry Fairfield Osborn, President of the American Museum of Natural History, to Dr. John C. Merriam, President of the Carnegie Institution, to Mr. James Gustavus Whiteley, Belgian Consul-General at Baltimore, to Dr. Jean M. Derscheid, Belgian zoölogist.

For their reading and helpful criticism of my manuscript, I am deeply grateful to both my life-long friend, Dr. Benjamin W. Mitchell and to my newer friend, Dr. Robert Cushman Murphy, whose ability my husband ever held in high esteem; to Mr. Arthur W. Page, my husband's publisher and long his adviser and friend, who has read certain chapters and who has given to me as well in this and in other matters most generously of his friendly counsel; to Dr. James P. Chapin, long a student of Africa in the field, for his help in identifying certain of the Kivu birds; and again to Dr. Jean M. Derscheid for supplying important scientific data obtained while on the Akeley-Derscheid expedition. To Doubleday Doran I am grateful for permission to reprint the substance of a series of articles which appeared in "World's Work" magazine in 1928.

I am not forgetful of the assistance of Virginia Deering in her painstaking care for the mechanical preparation of the copy. And by no means least, in the preparation of this manuscript, I make grateful and affectionate acknowledgment to Dorothy Greene Ross—friend as well as secretary to both my husband and myself—whose knowledge of his earlier plans and work has been

of great value. For her patient assembling of the historical detail of his plans for African Hall and his taxidermy and for her reading of the proof, I am deeply appreciative.

In my ability through all these months to remain, in thought at least, close to the 'heart of Africa,' which certainly in itself has made this book possible, I am grateful to all my friends in the American Museum of Natural History—particularly to Professor Henry Fairfield Osborn and to Dr. George H. Sherwood, lavish in loyalty through many years, and to the African Hall Committee, Mr. Daniel E. Pomeroy, Mr. Frederick Trubee Davison, Mr. A. Perry Osborn and Mr. Kermit Roosevelt—whose sympathetic interest in our African expedition has enabled me to continue to share my husband's effort for African Hall.

MARY L. JOBE AKELEY

American Museum  
of  
Natural History,  
1929





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## CHAPTER I

### A DREAM COMES TRUE

OUR African expedition beginning in January, 1926, was at last a dream come true. It was Carl Akeley's fifth journey and my own *first*<sup>1</sup> in 'Brightest Africa.' It marked the realization of our dearest hope.

We had two purposes, both of them close to our hearts. At last we were to begin here on the equator—in Kenya Colony and in Tanganyika Territory—a collection for my husband's masterpiece of museum exhibition, the African Hall of the American Museum of Natural History in New York. In addition we were to visit the Kivu volcanoes in the Belgian Congo—the most beautiful and primitive region in all Africa—and there in fulfillment of the mission entrusted to us by the Belgian Government, to continue in the Parc National Albert the study of the mountain gorilla and his environment, a study which Carl had begun in 1921.

In the preceding autumn my husband had written, "To-day I am again preparing to enter Africa. The forthcoming expedition means more to me than any that has gone before, not merely because it enables me to return to the country I love, but especially because it is the actual beginning of African Hall—the realization of my fondest dream. I am always dreaming dreams; many of them have been forgotten. But the dream of African Hall—of a great museum exhibition, artistic in form, permanent in construction, faithful to the scenery and the wild life of the continent it portrays—that dream has lived to become the unifying purpose of my work. Soon I shall be on my way to Africa,

<sup>1</sup> On October 18, 1924, Carl Akeley married as his second wife, Mary L. Jobe, who accompanied him on his last expedition to Africa and who was with him in the Belgian Congo at the time of his death. She thereafter became the leader of the expedition.

this time accompanied by artists and taxidermists, happy in the knowledge that my years of preparation are ended and my big work actually begun!"

That on this journey I should share with my husband the day's work, was indeed a rare privilege—that I should see his Africa for the first time, through his eyes, and guided by his experience, was to me a priceless gift, the full measure of which only the years can reckon.

When my husband first saw Africa it was still in the Age of Mammals. He had gone there with Daniel Giraud Elliot in 1896 to make collections of thirteen species in British Somaliland for an African hall in Field Museum of Natural History in Chicago.<sup>1</sup> Returning in 1905—this time to British East Africa—he secured specimens for an elephant group for Field Museum. On both of these expeditions he found abundant herds of game still holding their own against both the natives and a sparse white population. The interior was still primitive, perhaps as it had been through many centuries.

But when he returned to Africa in 1910 to collect elephants for the American Museum of Natural History many significant changes had occurred. The game was less plentiful and more difficult to approach. Sportsmen who came to East Africa to hunt big game were on the increase, and outfitting their *safaris* (expeditions in the field) had become an organized business in Nairobi. So wary had the elephants become that it required many months on the trail before he found as fine a bull elephant as he wished for his museum group.

Then one day he was seriously injured by an elephant that he had been tracking. Deciding to turn hunter itself, the beast doubled back on its own trail and attacked him from the rear. During his convalescence, while he lay pondering the ultimate

<sup>1</sup> The Trustees of that institution in June, 1927, designated that hall as The Akeley Memorial Hall. Field Museum of Natural History has also published (November 1927) a collection of photogravures of Carl Akeley's taxidermy and sculpture in the possession of that institution. The folio is entitled "The Work of Carl E. Akeley in Field Museum of Natural History."



tragic destiny of the game, he conceived the idea of African Hall. This idea grew and developed so rapidly that when he returned to America his project for a visual museum representation of untouched Africa was well defined. He presented his plan to the Trustees of the American Museum of Natural History in New York, who approved it for immediate execution. Actual construction of a hall, showing the important mammals of Africa, was to begin in September, 1914, but the outbreak of the Great War not only changed the destiny of nations, but prevented the immediate realization of his project. Nevertheless he built a sketch model—a miniature exhibition hall—to make his conception concrete. Standing outside the door of his museum studio, it remained a constant reminder that his African Hall project was only temporarily postponed. During the war Carl devoted all his inventive and mechanical energies to his country's service; then when the emergency had passed, he resumed his taxidermic mounting of African animals, every one of which was designed to fill eventually a place in African Hall.

He believed that groups for such an exhibit as he had planned must be done at once if they were to be done at all; that a hall could be built to house the exhibits whenever money was available, but that the collecting and mounting of animals could not be postponed. Greatly concerned in the immediate furtherance of his work and bearing personally one half of the expedition's expense, he returned to Africa in 1921, accompanied by Mr. and Mrs. Herbert Bradley of Chicago and Miss Martha Miller of New York. As a result he added to his collections a group of mountain gorillas from the Kivu District, Belgian Congo.

It was the generosity of Mr. George Eastman of Rochester, Mr. Daniel E. Pomeroy of New York, Trustee of the American Museum of Natural History and a member of the African Hall Committee, and the late Colonel Daniel B. Wentz of Philadelphia, which made possible our 1926 expedition. In the spring of 1925, Mr. Eastman, desiring to go on a hunting trip to Africa, had asked my husband to conduct him personally. Unwilling to

interrupt his work for the Museum, Carl replied that he could direct the party on condition that the expedition be made to secure a collection for African Hall, as well as trophies for the sportsmen. At a later conference at Mr. Eastman's home, the plan for the Akeley-Eastman-Pomeroy African Hall Expedition became definite. At this time Mr. Eastman determined to contribute four of the thirty-six groups for African Hall, while Mr. Pomeroy and Colonel Wentz each offered to finance a group and to accompany the expedition.<sup>1</sup> These three men, and Dr. Audley Stewart, Mr. Eastman's physician, arranged to join us in Africa the following May.

My husband appreciated deeply the timely gifts of his three friends whose generosity and enthusiasm thus enabled him to start his collection on a large scale while specimens suitable for museum exhibition were still available.

Strenuous months followed, crowded with preparations infinitely more detailed than a layman can possibly imagine. Carl supervised the temporary installation in a Pre-African Hall of all his finished work—the elephants, the gorillas, and finally a habitat group of peaceful lions typifying the exhibits he expected to prepare for African Hall. To this exhibit he added his three life-sized sculptures, 'The Lion Spearing of the Nandi.' This nucleus of the future African Hall was opened to the public shortly before our departure. Until the last moment my husband was considering plans for African Hall with Professor Henry Fairfield Osborn, President of the American Museum of Natural History, who throughout Carl's connection with that institution had encouraged his efforts and recognized his genius. In the President's Report for 1922 this great scientist had stressed the African Hall as the most pressing need of the Museum and thus had stimulated widespread interest in the project.

It is largely due to President Osborn's untiring efforts that the

<sup>1</sup> Mr. Pomeroy has since given a second group and in addition a further contribution to the funds for Akeley African Hall.



*Photo. by Mishkin.*

MARY L. JOBE AKELEY AFTER HER RETURN FROM THE EXPEDITION.





City of New York recently granted to the Museum the initial appropriation for the construction of Akeley African Hall.<sup>1</sup>

In addition Carl developed in detail his own African field program and that of his assistants. It must be understood that a collecting trip is much more than a hunting trip. A museum is often obliged to decline a gift of skins for mounting purposes because skins of animals are only one part of the materials required for a museum group. It rarely happens that a sportsman can preserve skins properly or that he has the technical skill to make the necessary studies and records. Even skins that have been properly preserved cannot be mounted truthfully by the best taxidermist if he has not had the opportunity to study the animals in life and in death.

In formulating the program of work for our expedition, Carl planned that an experienced taxidermist and a landscape painter should work in the place selected as the setting for each group. There they should secure all materials and data needed to meet the exacting requirements of the African Hall standard. Never content with backgrounds painted in the museum from his photographs and descriptions, Carl now realized a long cherished desire to lead artists into the field there to catch inspiration from the beautiful African country itself and from their study of its wild life. The two artists chosen were Mr. William R. Leigh of New York, who had gained distinction through his paintings of panoramic landscapes in Germany and in the Western United States, and Mr. A. A. Jansson, a competent background artist of the Museum staff. Two well qualified museum preparators, Mr. R. H. Rockwell and Mr. R. C. Raddatz, of the American Museum staff, to aid in field collecting, completed our party of workers.

It is a job in itself to outfit and provision a party of ten for a year in Africa. With Mr. Eastman and Mr. Pomeroy, Carl worked out a list of supplies—food, ammunition, and camp equipment.

<sup>1</sup> Mr. Akeley in 'In Brightest Africa' calls his proposed African exhibit, 'Roosevelt African Hall.' Since he wrote that book, the State of New York has provided for the construction of a State Roosevelt Memorial Hall, which will adjoin Akeley African Hall

Motor cars and lorries, carefully chosen for endurance and with specially designed and reënforced bodies, were shipped out from Canada; special articles of food—coffee, dried and canned fruit, canned cream, et cetera—not to be found to suit our taste in London, were purchased at home. Each of us took our own personal belongings and our favorite rifles, blankets and camp cots. Still and motion picture cameras, a motion picture test-tank, photographic films and plates, developing and printing apparatus, chemical supplies, oil colors, canvases and other artists' materials; preserving fluids, tin and galvanized iron preserving tanks, plastaline, and such tools as calipers and flesh knives, for the use of the taxidermists—in all, fifty-two cases of supplies and materials for the field—made up the necessary American freight.

But it was in London, the only city in the world where the problem of tropical food and equipment has been satisfactorily solved, that Carl and I did the major part of the outfitting. He knew this business thoroughly and had anticipated all details. Well in advance he had ordered our green linen tents, red-lined against the tropical sun and on our arrival at Silver and Edgington's we found them set up for our inspection. There, too, we selected our pith helmets, mosquito boots, air-tight tin boxes, portable washstands and folding canvas bath tubs, camp chairs, Uganda water bottles, canvas water-coolers with taps, flashlights and extra batteries, knives, forks and spoons, and a white enamel table service. For members of the sportsmen's party we purchased additional rifles from Holland and Holland. From the Army and Navy Stores we bought our food supplies as well as our medical kit. There we found Mr. Frank Little, 'expert in exports.' Strangely enough he was the same man who had outfitted Carl in 1896 for Somaliland. Many explorers of note since that day, including all of the Mt. Everest expeditions, have profited by his assistance. We ordered some of our supplies packed in tin-lined chop boxes that later, with the lids soldered on, could be used for the return of specimens. Ammunition was also packed in tin, each box containing assorted sizes and varieties. Carl had so

systematized our other orders that we were able to complete our buying in London in the short space of two and a half days.

From London we proceeded to Brussels where we were received by His Majesty, Albert, King of the Belgians, and by His Highness, Leopold, Duke of Brabant. There the details of our mission to the Belgian Congo were arranged. From Brussels we went to Genoa and there took ship across the Mediterranean to Suez, the Red Sea, the Indian Ocean—to Africa.

It was with such a background of experience, hope and dreams, that we at last found ourselves under way toward our heart's desire.

## CHAPTER II

### INTO AFRICA

KILINDINI HARBOR! Mombasa—the Island Town! Our lazy ship was gliding slowly through dangerous reefs to an anchorage off the palm-fringed coral coast of Equatorial Africa. Shoals of watchful sharks with their sharp, erect dorsal fins rippled the oily surface of the glowing sea. A red sun burned its swift way through the west, its broad orange shafts searchlighting the gray boles of giant baobabs and the white-walled, red-roofed houses of the town. A fleet of dhows, with brilliantly colored lateen sails, convoyed us, their hawk-visaged Arab sailors importuning us with offers of Oriental wares and transport to the quay. On shore the halyards sagged on the naked flag pole of the Customs Shed. The sun had dropped below the horizon into the illimitable blue. For this day at least, the government's business was finished in the chief port of British East Africa. Tardily our anchor, sliding down through thirty fathoms, gripped the harbor's sludgy bed. 'No going ashore to-night!' 'No chance for pratique!' The ill news spread throughout the ship. All night the yellow flag would float on the foreyard arm. All night we would endure suffocating imprisonment aboard the venerable Gloucester Castle, whose influenza scourge we—passengers and crew alike—had suffered since long before we crossed the Line. Only a gold and carmine halo lingered over the fast darkening land. Here and there red flames of bush fires lit up a smoky blue-forested shore line. A fitful, torrid breeze blew lazily over us, bearing unfamiliar sounds and strange scents that blended with the bilgy odors of the ship. There remained to us only the delights of watching fezzed and shouting 'box-wallahs' swarming overside, and odorous Arab vendors hawking their colorful gewgaws, exposed for sale on beautifully patterned Eastern carpets spread upon the



decks, and naked native boys, laughing, singing and jesting as their frail craft drifted lazily along the ship's side.

In the blazing white light of morning, my husband and I, in white tropical clothes, stepped from a white-canopied launch on to a glaring white quay, flanked by a wall of blacks. Black Swahili faces grinned at us; black hands with pale palms fought over and seized our luggage, swinging it swiftly up on black, woolly heads; black, calloused feet pattered ahead of us into the dark, oven-heat of the tin-roofed Customs Shed. Alternately searching, melting, and stopping to pant, we finally found the last of our luggage—my wardrobe trunk with two egg cases piled on top of it, their broken, dripping contents, patterning it in yellow, futuristic designs. Our bags and baggage collected, we received prompt and courteous customs clearance.

We left the babel of the Customs Shed, and entered into what for me was a new world. A brisk two mile motor ride across the noon-benumbed island to Mombasa Town led to cool shade and cool drink and cool lunch in a comfortable hotel, the Manor House. Its lofty ceilings, cement floors and clean coral rock walls two feet thick offered us a haven secure from the blasting heat. It is only in such a refuge that a siesta banishes the newly arrived northern stranger's dream of torment.

An hour before sunset we fared forth into a world of colorful Orientalism, redolent, different, mosaic. Palms swayed gently in the rising breeze. Mischievous, curious, shy Sykes's monkeys peered down at us as we passed. Bougainvilleas draped unpretentious dwellings with royal garlands of amethyst and ruby. All around us flowed the newly awakened life of the tropic city. It was the hour for which the day had been created!

We stepped into a man drawn, two wheeled cart, my first rickshaw. The motive power was a jet black native wearing a ragged brown tunic. His head was crowned with a chaplet of dark ostrich feathers and his ears, arms and legs shone with heavy brass rings. Certainly a cannibal chief should look like that! All he lacked was a sharp knife and a long spear. I looked more

closely. The knife was swinging from a leather thong at his belt. Another Swahili, equally wild looking but a little more pretentiously dressed—his tunic had once been white—dashed up to push the rickshaw. With a leap, a jerk, a bang and a duet of howls, they catapulted us forward along the dusty road. The lead boy shouted lustily—I should like to write 'savagely'—and jangled a small bell at every crossing where a big native policeman in a blue uniform and red fez, barefooted but with blue puttees encasing his long, wiry legs, waved us ahead or commanded us to stop. For the first ten minutes I had an irresistible impulse to apologize to the lead boy. To use man power in this age of gas and electricity! It was an outrage! I was ashamed of myself and of all my kind! But not one of the dozen words in my newly acquired Swahili vocabulary seemed to fit my state of mind, so I tried to relax in the brief intervals between sudden stops and slight collisions and enjoy the kaleidoscopic scene.

We were in a long stream of rickshaws going back and forth along that great white dusty road which runs through the middle of the Island. Cries and clanging bells and curses when a brakeless rickshaw ran amok! All Mombasa was on parade. White men were dashing home from their offices; white women in dainty afternoon hats and frocks were bound for a tea party; greasy-turbaned Hindus sprawled like fat spiders and urged their boys to greater speed; veiled Eastern women, their slim brown children beside them, were carried swiftly by; a low-caste Oriental in scarlet fez and filthy robe, with a pile of petrol tins on either side of him, hurried from the motor mart to the tinsmiths in the bazaar; most amazing of all, a monkey-faced native, decked in the cast-off or stolen finery of his master, a cream colored silk suit, ancient sun helmet and shoes through the holes of which his leathery toes protruded, lolled grandly back on the cushions, puffing a cigarette and grinning at every passerby, while with his inevitable cane he kept time in a rhythmic tattoo with the shuffling feet of the rickshaw boy. Rickshaws everywhere!

Pat! Pat! Pat! The incessant patter of bare horny feet along the dusty road. Broad shoulders, narrow shoulders sloped always to pitifully narrow hips. Long, scrawny arms and legs—steel-muscled they must be to pull the heavy loads! Drip! Drip! Drip! Oozing in every acrid pore. Surely 'the head must bow, and the back must bend,' wherever this pathetic creature goes. Six years he will last at most. No wonder he habitually grumbles at his *baksheesh* (gratuities) however much you give him. Cayuse, camel, mustang, mule, burro and bull team—yes and even the old back-packers of the north! I have traveled over rough trails with every one of them, but to me the rickshaw boy will ever be the most fettered, the most tragic of them all.

Leaving our rickshaw, we walked down to the surf-beaten shore and up a coral hill forty feet high to the old Fort Jesus, built by the Portuguese in 1593 and dedicated to the Savior. It still bears in its quadrangular walls the symbol IHS, but now the British use it as a military store and central jail. Under its walls, rose and green and gray in mellowing age, a boy knelt on the ground kneading bread in a wooden mixing bowl; and where a giant fig tree with leaves thick and broad like a grape vine cast its heavy shade, another native washed white linen, his sing-song chant rising and falling interminably as he worked.

Beyond the old fort stands the lighthouse beaconing sailors to avoid the fate of the old wreck whose engines still show black above the waves crashing and grinding on the treacherous coral reef. We walked on to where the dhows were discharging cargo, where natives were carrying back-breaking loads up a long stairway cut in the coral rock. Here was one great high-stemmed canoe, with long-handled paddles ending in disks and manned by ten naked singing blacks. It shot swiftly through the water, one boy with deep resounding drum setting the time for the stroke and pull of the paddles as he urged the canoemen to utmost speed. The rhythmic monotone seemed a charm to ward off a pair of evil-looking sharks that followed closely in the wake of the frail curvetting craft.

To the south, cooled by the sea, rests the European suburb with its golf club and country club, its pretentious homes and charming gardens. It is a center of modern life in the tropics at its best. But the Old Town cherishes an ancient Orientalism in its maze of narrow irregular streets, lanes and tiny footpaths. It was here that Ibn Batutu in 1331 applied the term 'a large place' to the Perso-Arabic 'Mombasa, the Magnificent.' When in 1498 Vasco De Gama landed in this same offshoot of Oman he found lively commerce, Calicut Banyans, Oriental Christians and an unfriendly ruler who tried to entrap him in the beginning of the long conflict between Arab and Portuguese, which finally ended in British protection and administration. Though for twenty years, 1887-1907, it was the actual capital of British East Africa, Mombasa still nominally forms part of the sultanate of Zanzibar.

From the sea we walked up to the ivory warehouse. Two boys were just entering, each carrying on his head a beautiful elephant tusk. "Another old monarch has fallen," my husband said. "Each tusk will weigh a hundred pounds." And so we found them marked; one, 100 pounds, the other 105. Inside the long dark building we saw one of the greatest ivory collections in the world. Here were tusks of various weights and sizes—tusks hacked into pieces, old brown ivory tusks worn and broken in some dreadful forest combat, fragments of tusks discarded by the way, small hard tusks of the coast country, where heat is great and food is scarce; and the finest tusks of all, beautiful soft ivory from the cool regions of abundant feed. What a procession of giants sacrificed to the god of ornamentation!

Here were fragrant depots bulging with all the exports of Equatorial Africa, coffee and cotton, tobacco and rubber, sisal and chilies, horn and hides, and a hundred yards away throbbed the colorful varied commerce of the bazaar.

Tailors and tinsmiths, carpenters and chandlers, diligently plied their trades. Green grocers and bakers and butchers haggled with their purchasers. Goldsmiths with microscopes bent in complete





A FLEET OF DHOWS—MOMBASA HARBOR.

*Photo. by Carl Akeley.*



OLD FORT JESUS, BUILT IN 1593, STANDS ON THE SURF-BEATEN SHORE.

*Photo. by Albert Butler.*





*Photo. by Albert Butler.*

MOMBASA STREET SCENE. NATIVES RESTING UNDER A SPRAWLING BAOBAB.  
BOUGAINVILLEAS EMBOWER NEAR-BY FENCES AND BUILDINGS.



*Photo. by George Eastman.*

THE EXPEDITION'S BASE HOUSE IN NAIROBI SET IN A LARGE GARDEN OF  
FLOWERS AND FRUIT—PALMS AND CEDARS.

absorption over rare bits of jade, chipped rubies and seed pearls, surrounded by tiny anvils, gold leaf and ingots and little piles of multicolored semi-precious stones. Half-grown black children, sucking joints of sugar cane, gazed longingly at little open hash-houses with piles of cooked rice and unfamiliar steaming porridges and greasy cakes and thick black soup in bubbling caldrons. Hard-faced traders weighed on questionable balances from large bowls and boxes portions of mealy-meal, brown wild rice, millets, kaffir corn, pulses, tea, curry powder, and coarse yellow sugar. In clean-swept freshly sprinkled *dukas* (shops), Arabs and Indians with henna-dyed beards and fingertips, gossiping intermittently of their last hadj to Mecca, and expectorating the red juice of the betel nut, monotonously measured off yard after yard of Turkey red, 'Americana' (muslin) and gayly flowered calicoes, or counted piles of red fezzes, wide-brimmed straw hats and native palm-leaf baskets. An evil-looking old cadger who would have been at home in any slum of London, New York or Hong Kong, his cart laden with old umbrellas and emory wheel, ambled through the crowd, hawking for knives and shears to grind and umbrellas to mend; and at the end of the swarming street opened a more pretentious shop bespeaking potential wealth and filled with silks and embroideries, patterned brasses and enameled coppers, heathen gods and incense, carved ivory and teak. Only a volume can describe the variegated mosaic of an Indian Bazaar.

We passed ancient well-built dwellings of coral rock, tinged deeply with the pigments of time, their tiled roofs, green shades and wooden shutters conserving a sanctuary of coolness. Their portals and double doors of teak inlaid in ivory and brass bespoke alike the skill of their master builders and the wealth and distinction of their first ancient sahibs. We paused in wonder before strange Hindu, Parsee and Mohammedan temples all sheltering a throng of reverent prostrate worshipers, for with the setting of the sun had come again the hour of prayer and a thousand shoes and sandals waited on the steps or in the dusty path.

Now as twilight descended on the scene, we entered the borderland where populous native village and motley Indian quarters crowd and meet. Veiled, barefoot women, slim-legged and silver-ankleted slip catlike from house to house, their tiny underfed children clinging to their hands or to their flowing embroidered skirts. We were suddenly convinced that no Indian child is ever young, that, even though a baby, he is staring at you from under his gold-embroidered velvet cap, with the full, knowing look of maturity and that he must have had at least a score of reincarnations behind that sophisticated gaze coming from the stored-up memories of the ages. Tall black Swahilis, leaving behind the thriving mart of the hated Hindus, troop homeward to little huts of stone and mud, beamed with wattle and roofed with thatch. From their labyrinth of streets and blind alleys and devious dimming footways come snatches of dark laughter and deep song. Africa's children are at play! Through narrow case-ments glows an occasional flickering taper. Here are bake shops, fish shops, meat and vegetable shops—if that may be called a shop where the wares are all outspread upon the ground. Here, too, are tiny shops with bowls of mealy-meal and brown rice and sweet-meats cooking in smoking oil. Irresponsibly living from day to day though he does, the Swahili is unwilling to abandon commerce wholly to his natural antagonist, the Indian. Here in our path is a barber's stand where woolly heads are shaved. Everywhere that food is found is a civic center for gossip and a crowded rendezvous for chattering native men. Right before us in the alleged street a cook-fire glowed in an open brazier, and there were foregathering all the chickens, goats, dogs and fat, black, toddling children of the quarter. Native women in bright becoming draperies hid in darkening doorways or scurried before us along the narrow, winding streets, while a few young girls, free in glance and comely in body, smilingly watched us pass. An ancient beggar flung out his hand imploringly for baksheesh, then gyrated about like a youngster in appreciation of our modest alms.



Turning towards our hotel we traversed the open space of the common, where under a giant, sprawling baobab, embowered with magnificent purple bougainvillea, flamed a blacksmith's forge. It illuminated long rows of shining iron shoes and bars of steel and the powerfully muscled native smith at work. Children frisked about the resounding anvil, while a half dozen tired donkeys stood and slept. In the deepening twilight we emerged from this colorful, throbbing, mysterious Mombasa which in so short a time had strangely intruded itself into our very souls. We reluctantly came back to the spacious vine and flower-decked terrace of the friendly Manor House; to iced drinks and pleasant conversation. There we found our friends, Captain Tracy Philipps, bound for Western Uganda, and Baron von Zuylen, returning to his administration of the Haut Uele, Belgian Congo; and there was Grandma West out fifteen years in Africa and never a day of fever, whose twin grandchildren, African born, rollicked about the garden with all the spirit of children of a northern clime.

Our first night in Africa! My first night under a canopy safe from the droning dreaded mosquito of the tropics! Soft winds bringing in soft voices, night witchery intermingled with the lightest possible slumber—surely in such an hour and place no one would crave the deep sleep of perfect rest. Finally came the first cool gray hour before the faint pink dawn, the hour of all hours for sleep in the tropics had not the waking tremor of the world suddenly begun. Green and spotted lizards chased each other across our white walls, or clung to the ceiling and blinked down at us. A soft murmur of voices drifted up from the high-road, and the sound of bare footfalls. I stole to the window to salute the day and to watch the long procession pass. In front, across the fountain-sprayed plaza, big yellow moon-flowers still bloomed among the vines and palms shielding the Catholic Mission and the priest's house. Beyond the red roofs came a vision of the blue quiet sea.

Now along the wide dusty road cut out of the solid rock ad-

vanced the long procession of the morning, hastening ahead of the sun into the shelter of the town. All the Swahili boys and girls carried heavy loads upon their heads, bundles of wood and sugar cane, yellow and red bananas, papayas, pineapples, baskets of vegetables, sacks of grain, bundles of laundry, and commodities unknown to us. Here hurrying in to the varied pursuits of the day were Indian clerks and small merchants in white or khaki, bound for their banks and shops; Moslems in long flowing white robes with gay red borders almost touching their bare or sandaled feet; a middle-aged ebon black woman, deep-chested and wearing a trailing robe of snow-white muslin with giant crimson flowers! Another, evidently of importance, decked in shining black silk, carrying a red umbrella, and attended by two young boy servants each with large head loads. Every boy, black or brown, was armed with a cane or stick and many carried leafy wands with which they beat off swarms of flies. Next came a long string of slow-moving donkeys packing bags of broken coral rock and then behind them native-made wagons, each heavily freighted with bags of grain and drawn and pushed by six black men.

The reddening sun now shot up into the sky and blazed across the moving scene. For an hour big black birds had been flying about noiselessly and sleepy finches had twittered faintly. Now, a bird with a song like a cardinal grosbeak sang gloriously; all yesterday he had warbled intermittently even when the mercury registered one hundred and eight. Swallows and cawing crows flew overhead, black muscovy ducks quacked in the Plaza and turkeys feeding at the edge of the priest's garden answered them. Our door was softly opened and our boy entered bearing two cups of steaming tea.

That afternoon at four o'clock, after a day of appalling heat spent in arranging the transport of the large outfit that we required for a year of scientific collecting for African Hall, we stepped aboard our train for Nairobi. Our faces were at last set toward the cool Kenya highlands.



### CHAPTER III

#### UNDER WAY

By dawn we had reached the fresh wind-blown uplands of the Kenya Game Reserve. All through the ever-cooling night our wood-burning engine of the Kenya Uganda railway had labored to pull us from the tropical forests of sea level in a distance of only two hundred miles to the wide prairie-like lands of Africa's equatorial plateau, at an elevation of more than three thousand feet. As the locomotive filled our compartment with little showers of spray, sparks and cinders, we had the sense of its Titanic struggling. There were only two cars ahead of us; and in a degree at least in common with the engine driver we felt the effort of the journey.

A long stop at Samburu for dinner, where with the other first class passengers we ate at a common table, and slid our plates down to the floor as each course was finished, frequent stops at big wood-piles and at tall black water tanks for refueling and 'for watering the train,' the babel of voices and shuffling feet as passengers boarded or left the train, the clattering of boxes in the luggage van, sharp spoken messages delivered by Indian telegraph operators—all these had punctuated the impressions of the darkening night. Certainly there was no possible reason for profound sleep, even if the narrow, hard-cushioned seats of our compartment had lent themselves to rest. Here, rolled in my blankets—we had not been able to endure even a sheet at Mombasa—I kept my ears open all night long, hopping up and peering out of the window now and then to investigate some unusually strange sound, and to watch the ever-changing sky. I was afraid of missing something I had traveled nearly twelve thousand miles to find.

At last the East began to quicken, the bright southern stars to pale. In the dawning light we saw brown shadows moving; in

another ten minutes we had caught sight of the game—not the impressive herds of thirty years ago when, in the heroic days of African exploration and railway building, lions with inquisitive searching claws are reputed to have pulled men from *boma* (stockade) and from train windows for a midnight lunch, but game in fair variety and quantity, considering the evil days of killing the world has been through and still endures. Giraffe, wildebeest, kongoni, zebra, ostrich, Grant's and Thomson's gazelle (popularly known as 'Tommies') were on parade. Two leopards loped up from a water hole in a bed of reeds. On this, my first trip to Africa, even so fleeting a glimpse of the wild life of a strange continent impressed me deeply. Neither of us could leave the windows of our compartment long enough to dress properly or to eat breakfast. Seemingly that great hour for which we had both been living so long had at last arrived.

And then with the first sparkling sunlight, beyond the grazing herds, there was revealed one of the most magnificent sights I had ever seen—Kilimanjaro's scintillating ice-dome rising from a vast base, far extending, and of mysterious misty blue.

This highest known summit of the continent, an ancient twin-peaked volcano, stands in isolation more than nineteen thousand feet above the sea.<sup>1</sup> Close to the ice and cinder mass filling the extinct crater creep flowering alpine plants, while in the dense forests and rolling plains of the lower slopes an abundant wild life still persists. Only as late as 1845 were reports of the existence of this snow-covered peak brought by Arab traders to Zanzibar, causing Johannes Rebmann in 1848 to journey from Mombasa in search of the mountain. For fifteen years professional geographers scoffed at his reported discovery, and it was only when Baron Karl von der Decken in 1861, and Charles New in 1867 made similar journeys, that Rebmann's story of a snow-capped peak on the Equator was corroborated and believed.

For more than an hour Kilimanjaro's cloud curtains were

<sup>1</sup> Mount Kilimanjaro has three cones: Shira, 12,878 feet; Kibo, 19,456 feet; and Mawensi, 17,291 feet.

drawn apart and our vista was complete. Loving and knowing mountains as we did, it was not difficult to understand its lure to the later explorers—to Joseph Thomson (1883), to Sir Harry Hamilton Johnston (1884), and finally to Dr. Hans Meyer, who accomplished the first ascent in 1889.

Soon we saw Mt. Kenya's serrated, ice-draped peak clear and dark against the northern sky. It is a very denuded old volcano, more than two thousand feet lower than Kilimanjaro, and its complete crater is said to have reached two thousand feet above its present summit before the erosion of the ages began. Ridges radiating outwards from vast cirques, high up on the peak, are separated by broad valleys. Fifteen glaciers give a never-failing water supply to lakes and springs, and nurture blossoming alpine meadows and dense forests that harbor herds of elephant and buffalo. This great volcanic mountain was first seen from a distance by the missionary Ludwig Krapf in 1849 and its summit reached by H. J. Mackinder in 1899. To me this simultaneous view of Africa's two lofty mountains on the same meridian and yet so different in character and contour was a spectacle never to be forgotten. Even the African veteran was impressed by this marvelous array. Imagine the recruit! I was dumfounded. The Red Gods were indeed good to us!

From dawn until midday, always in what was once the great game fields but now where wild life is scarce, our engine drove along and up an ever-increasing grade, wandering among the brown hills of this vast plateau, around dry water courses, through Machakos Road and Kapiti Plains, and finally skirting the Stony Athi, whose banks fringed with green, table-topped acacias and a dense thorny undergrowth, bespoke, even in this dry season, a trickling water course connecting turbid pools.

At last our heavy train of five luggage vans and eleven carriages rattled past long rows of goods sheds and stockyards alongside the spacious, shaded platform of the well-built modern railway station of Nairobi, capital of Kenya Colony. From the cars poured out first and second class white passengers, third class

Indians and Goanese (an admixture of Indian and Portuguese). From the box-like cars of the fourth class came a long stream of chattering, laughing natives, carrying all sorts and sizes and colors of bundles, blanket rolls, chop boxes, baskets of goods, chairs, bottles, chickens and children. Lined up to meet the train were similar groups of white men and women, Indians and natives—the latter clamoring for our luggage, and almost wrenching it from our compartment. Then Ali Khan, brown, high-booted, whip in hand, veteran Oriental transport driver, greeted us, took full charge of our luggage and we motored away in a stream of cars and rickshaws up the dusty white main thoroughfare, Government Road, to the old stone hostel, the Norfolk Hotel, for decades the rendezvous of English officials, sportsmen, white hunters, travelers, and the more fortunate empire pioneers. Thick stone walls shut out the noonday heat, and in a meagerly furnished room with cement floor, we took up our temporary abode pending the arrival of our supplies and equipment.

Less than thirty years ago Nairobi was hardly on the map; twenty-five years ago my husband had found it a 'town of tin houses, many black people, a few Hindus and fewer white men.' He had camped with his safari a stone's throw from where the large National Bank of India Building now stands. Five years later when Colonel Roosevelt's visit to Africa threw the American searchlight of publicity on this little-exploited part of the world, it had already acquired many appointments of an English community. Although herds of wild game still fed like domesticated animals within sight of the town and sometimes stampeded through its streets, yet administration headquarters, Government House, a new English hospital, a clubhouse with cricket and athletic grounds, a race course and a few small English shops where almost any necessity could be bought, and the thriving business firm of Newland & Tarlton, Ltd., safari outfitters, all were here. Then the natives stood agape as an occasional automobile honked its way among bullock carts and rickshaws; and in Parklands, in a few bungalows, was the unforgettable hospitality of the Eng-





*Photo. by Carl Akeley.*

ON THE EQUATOR. THE GLACIATED PEAK OF MT. KENYA RISES FROM A  
DENSELY FORESTED, FAR EXTENDING BASE.





SIXTH AVENUE, NAIROBI.

*Photo. by James P. Chapin.*



THE INDIAN BAZAAR, NAIROBI.

*Photo. by James P. Chapin.*

lish frontier. That to-day Nairobi is essentially a white man's town with a white population of nearly four thousand and some eight thousand Orientals, is not to be wondered at; that it should have an Indian bazaar, extending over nine acres and several large markets where native blacks buy and sell and barter; that Government Road and Sixth Avenue, the two main thoroughfares, are crowded with modern department and grocery stores, restaurants, sporting goods and chemists' shops, banks, beauty parlors, meat shops, Paris gown and tailor shops, hardware emporiums, and automobile sales rooms, is in conformity with the rapid economic development of all British East Africa. Lumber yards, saw mills, flour mills, stone and cement building plants, sheet metal mills, cabinet and carpentry shops, auction rooms, harness and leather shops, farm machinery shops spread out in adjoining streets. Rolls Royce, Packard, Buick, Chrysler and a half dozen other less pretentious cars—motor lorries, cars with safari bodies, bullock carts, wagons drawn by three span of mules—rickshaws, porters carrying head loads, Kikuyu women bearing heavy back loads of corn fodder or products from their *shambas* (fields)—all intermingled in the flowing traffic stream of Nairobi's commerce.

In the higher avenues and near the town are schools and churches, two country clubs and many attractive homes of pleasing architecture and with cultivated gardens. The outlying rich estates of coffee, cotton, fruit, sisal, wheat and tobacco, the Kikuyu products of corn, potatoes, squash, beans, bananas and chickens; the Indian market gardens where many vegetables of both the temperate and tropic zones are raised; all these are the fundamental bases of Nairobi's thriving business. Almost without exception the white man's estate affords a well-built and inviting residence surrounded by flowering vines and shrubs, for the English settler has invariably come to stay; and here if anywhere is delightfully exemplified the axiom that an Englishman's home is his castle. To one who has never experienced or visualized the well-organized social or economic life of Kenya Colony, it

is indeed difficult to imagine that the transplanted English home, English sport, and English thoroughness are all here.

The day of our arrival Nairobi was decorated in bunting. Flags of England, ensigns of the Orient, banners of Islam—all Nairobi was colorful, adorned, fluttering. Domed mosque, flag poles in English streets and Indian bazaar, all paid tribute to His Royal Highness, Aga Khan, reputed to be Persian by birth, the direct descendant of Mohammed and married to an Italian wife. President of the All-Indian Moslem League, Leader of Moslems of the Empire in the World War, active in the Peace Conferences of 1919 and 1921 and 1923, internationalist winner of the Nobel Peace Prize in 1924, and owner of the finest racing stable in the world, he was naturally a most conspicuous visitor in the colony. To me it seemed that our progress up Government Road was fraught with much excitement; that had an American brass band been playing and marching right ahead of us it could not have savored more of a gala day. The Guard of Honor—Mohammedans dressed in khaki uniforms and wearing thick, woolly, yellowish-brown fezzes—patrolled the entrance to the Mosque and the adjoining streets, keeping at a distance all curious unbelievers. Crowds of elaborately and, for a wonder, immaculately dressed Indians were everywhere—crowds that increased in number from day to day. From every little town and frontier *duka* (trading post) in Kenya the Indians came pouring in; the following week all Uganda arrived. Tall men, short men, fat men, lean men, all turbaned and wearing long frock coats of silk! Women, tall and slender and adorned in vari-hued silks from veiled heads to fettered, bare and bejeweled feet, their draperies and lacy frilled pantaloons billowing as they walked! Women with tiny babies whose bright beady eyes looked out of mature brown, serious faces! Little girls in long flowing silk skirts, and little boys in long frock coats and trousers, and all with the inevitable gold-embroidered cap—tiny, old child-fragments of an ancient humanity! Twice daily they gathered in the Mosque, flooding low seats, floors and steps and Aga Khan in full regimentals, in a

beautiful Rolls Royce car, and with many brightly uniformed aides-de-camp, arrived in state to give his blessing.

But our entry into Nairobi auspicious as it seemed in the midst of so much ceremonial, fanfare, and shifting color, was not without stern problems. No sooner had we surrounded ourselves with our few personal belongings than the question of finding a base as expedition headquarters confronted us. Philip Percival, the noted white hunter whom Carl had secured for Mr. Eastman, came in a day or two after our arrival for a conference and aided us in our search. In over-crowded Nairobi a recent fire had destroyed all of the old 'go-downs' or tin shacks, available in the old days for such a purpose. No hotel afforded either workroom or grounds. For more than a week we searched the town and its environs without success, inspecting the few vacant dwellings and interviewing prospective landlords, and Carl had almost decided to purchase and set up two large tents, and have them guarded in our absence by *askaris* (native soldiers), when we finally secured under a nine months' lease a vacant residence with commodious grounds in Parklands, on the outskirts of the city.

In these days of arduous search, I had the joy of meeting many of Carl's old friends closely identified with old Africa. Mr. Leslie J. Tarlton charmed us with his reminiscences. His exchange of tales and adventures with my husband seemed worth traveling to Africa just to hear (How we urged that he put them in permanent book form!) and Mrs. Tarlton, 'the same young and charming hostess of fifteen years ago' whose kindness to me I shall never forget; Alan Black, who told us of waterless elephant country he would 'be willing to take Carl Akeley into but none other'; A. Blayney Percival whose twenty-two years as Game Warden of Kenya Colony have given him an experience and fund of information unsurpassed; and the Philip Percivals—God bless them—whose hospitality at Potho Estate and whose comradeship in the town and on safari were among the richest treasures of all Africa to my husband and to me; Lady McMullan, with whom we had a brief visit as she departed for Europe;



and our newer friends, Captain A. T. A. Ritchie and Captain Keith Caldwell, Game Wardens, whose unfailing consideration removed from the formalities of hunting licenses and export licenses the usual onerous details and whose kindness and sympathetic helpfulness were of immeasurable value to me at the end of the expedition.

While we were still waiting for our goods to arrive we put our fleet of motors into commission. They had been sent from Canada and had to be uncrated and assembled. They consisted of a Buick seven passenger car for Mr. Eastman, Chevrolet motor lorries and a light car, the errand and help car of the safari. It was my first experience with a right hand drive, a left hand gear shift and with traffic passing to the left in the English way. But it was only the matter of a few hours of experiment from the time I tried Bob Gilfillan's car (he is an American and owns the largest motor mart in Nairobi) until we drove the Buick into Police Headquarters to take our driver's licenses. Perhaps the years of driving we each had to our credit was a factor; but it was not long after doing a few tricks in backing and turning in and out of the gates that we paid our thirty shillings and drove off with our gay little red driver's cards in our pockets.

Then too, we had much to do in making final arrangements with Mr. Eastman's white hunter, Philip Percival, and his assistants; to secure proper helpers, motor mechanics and transport drivers for his safari. Although my husband had secured Mr. Percival's services months before leaving America, the consummation of plans made necessary many conferences in Nairobi and also a delightful three days' visit at the Percival home in Machakos sixty miles away.

One evening when we were at Government House as dinner guests of His Excellency the Governor, Sir Edward Grigg, and Lady Grigg, the Governor questioned us as to the welfare of our expedition and expressed his concern at our delay. Augmenting the services of a special agent at the coast and our own telegrams, it was the kindly interest and potent influence of the Governor



which secured the ultimate transportation and delivery of our freight detained so long in Mombasa.

Following the arrival of our expedition supplies, came the problem of clearing them through Nairobi customs, the necessary payment of twenty to thirty per cent import duties, the search for lost packages which came up in later shipments. During this round of investigation we made the acquaintance of many important men in Nairobi—customs, railway, transport and United States consular officials.

At last we moved into our expedition base—a fine stone house containing five rooms, a large attic and a beautifully cool basement of stone and cement. It stood on high ground with an extensive view and a most charming and spacious garden. It was fenced with palms and cedars and brilliant bougainvilleas growing over trellises and trees. Plots of dahlias and large bushes of heliotrope and geraniums, verbenas and cosmos and petunias were bordered with closely cropped privet. Red and yellow poinsettias six feet high and in constant flower rose in a central mass. In the rear was a garden of vegetables, pineapples, bananas, guavas, oranges, limes and pomegranates. Here under tall cedars we pitched our new green tents and I began my first housekeeping with native servants.

In the midst of the search for the base and while waiting for our goods to arrive, Carl went to Mombasa to meet Leigh, Raddate and Jansson, and I began to sign on the black boys of our safari. In Africa to-day, the noun *safari* means the entire outfit for travel in the field, including equipment of all kinds, and all native employees; the verb, to *safari* means to make a trip or expedition into the field. Throughout a large area of Kenya and Uganda and in many parts of Tanganyika the day of the large safari of native porters has passed; the motor train has taken its place; but even though petrol has largely supplanted man power in transportation, the black boys—the universal term for any native servant regardless of age—still remain important members of an expedition.

In the beginning I signed on only fifteen boys, including cook, personal boys and porters, for our first camp in the Lukenia Hills. This staff was subsequently increased to about twenty-five, and included a headman or *neapara*. When in the town they are entitled to cash *posho* (daily ration). When the expedition moves into the field, they eat rice or mealy-meal ground from Kikuyu white corn, and demand meat at least once a week.

Kenya now has a strict labor law, requiring a complete accounting by every employer. It was therefore necessary for me, in addition to keeping their *posho* accounts and purchasing accounts, to keep a detailed payroll. At first my payroll was alphabetical, spelled according to their pronunciation of their names; later I rearranged it according to the numbers on their *kāpendis* or employment papers. On these papers are required the names of all employers, the wages, the date of entering and of leaving service. No boy can enter or leave service without securing his master's signature of approval. When a boy is discharged the employer is required to inform the office of the District Commissioner.

Our boys, so written on, assembled each morning outside my room at the Hotel Norfolk to receive their fifty cents in Kenya currency or twelve and one half cents in American money. At first they seemed shy, rude, ignorantly primitive. Three, I remember, exerted themselves to be polite—my tent boy, Jacobo, another tent boy, Peter, and Mwanika, the cook. One old Swahili porter, Thomasi, was innately courteous and he was the only one of that lot that proved faithful during my year in Africa.

The most valuable black boy whom my husband ever had in Africa was Bill (Uimbia Gikungu), a Kikuyu from Kehuhia, near Fort Hall. As soon as we reached Nairobi, Carl began his search for him. Twenty years ago, as a thirteen-year-old boy, Bill had attached himself to Carl's safari. Since that time he had been intermittently in his employ as tent boy, gun boy, tracker, and headman. He had proved on every occasion his faithfulness, his resourcefulness, and his ability to secure proper help. Carl

considered him the best tracker as well as the keenest hunter, black or white, that he had ever known. Because he had entered Africa from Cape Town on his trip into the gorilla country in 1921, he had not sent to Kenya for Bill and he had missed him constantly. He was confident that even on an expedition among wild tribes in Africa, he would rather have Bill as headman and as counselor in dealing with the savages than any one he knew of. Rich indeed must have been Bill's reward when he heard his master tell me that he owed his life to Bill's courage and intelligence when in 1911 the elephant had smashed him on Mt. Kenya. Just as we were about to give up hope of finding Bill, he walked into our house in Parklands. No one was ever more welcome. Henceforth on our safaris, he stood a man apart—in reputation, in intellect, and in the heart of his master.

Before coming to Africa, I had imagined that all black boys would look alike to me, but I actually found that they presented as many different physiognomies, statures, and personalities as would a similar number of white people of any nationality. It was easy to learn their almost unpronounceable names and to associate each with the proper boy. The boys, unmixed Ethiopian, were all shades from light brown to black. As I worked with them and came to know them day after day, I found them serious and exuberant; sullen and joyous; poised and lackadaisical; industrious and idle; efficient and incompetent. In fact it seems obvious that we of fairer skin are not so far removed in fundamentals from these dark children of the sun.

It was indeed a day of rejoicing when we assembled our safari outfit, left behind our store clothes, extricated our servants from the delights and fascinations of the bazaar, and rolled out of Nairobi, our cars and motor lorries piled high with field equipment and laughing, singing black boys. We were off to our first work camp in the Lukenia Hills.

## CHAPTER IV

### OLD AFRICAN GAME TRAILS

WHEN my husband told me that he intended to begin his first group for the African Hall on one of the rocky kopjes of the Lukenia Hills in Kenya Colony my heart sank. I was eager to be off to the 'real Africa,' to a camp somewhere close to my long-dreamed-of Mt. Kenya. After the irksome delays we had already endured in Nairobi, the thought of spending a month or more on those brown and arid Lukenia Hills above the more desolate and deserted Athi Plains was indeed disappointing.

And yet I knew that Lukenia and the Athi Plains must be, or at least had been, real Africa. Were they not the Africa of the great naturalists and hunters and travelers of the world? Though my reasoning gave me stoicism, yet my hope was faint. Had I not seen them with my own eyes an almost gameless desert, irreclaimable beyond imagination?

On our arrival in Africa all Kenya Colony was panting for the rains. The plains were brown, the fields were parched, and withered foliage drooped on the trees. When we had driven to the Philip Percivals' we had forded the Athi River in a motor car. It was only a tiny stream trickling along over a bare sandy bed. Acacia trees fringing its dusty banks were still green and lovely, but they were the only visible signs of floral life on the landscape. Half way from Nairobi to Percival's we passed the Lukenia Hills. As we first viewed their southern terminal rising abruptly from the rolling plains, and two days later as we traversed the entire line of hills and *kopjes* (bare rocky hillocks, literally 'heads'), looking for a possible camp site, I saw only dried and burnt desolation, with fantastic, multicolored rocks as the crowning feature. On the trip of one hundred and forty miles





CARL AND MARY AKELEY IN THEIR WORK TENT IN THE LUKENIA HILLS. MR. AKELEY IS MODELING A GROUP OF KLIPSPRINGER FOR THE FIELD MODEL OF A GROUP FOR AFRICAN HALL.



to and from the Percivals', I saw only two wild flowers—one a frail purple bloom resembling a petunia, the other a tiny yellow rose. But the dry season was nearing an end—at least so every one hoped, because there had been an unusual drought, the climax of three practically rainless years. At Percival's the coffee was in flower, their wheat had been sown, and they were confident of the speedy coming of the rains.

Back in Nairobi I began our preparations for this desert country with but slight enthusiasm. Several threatening days followed. Every afternoon the sky became overcast and spectacular thunderheads piled up in the sunset sky. Finally, within the week, we were awakened one morning about four o'clock by a sweeping deluge of rain drenching the hotel courtyard and splashing upon our veranda. It made earth and air sweet and fragrant as with the smell of dripping tree and soaking humus after April showers. Birds which had previously only chirped and croaked at the dawn now sang full deep songs of rejoicing. In another night leaf and flower buds became green and glowing. The whole world was rested and revived.

We had heavy downpours each morning, but it always cleared gloriously in the afternoon. Then the horizon was piled high with masses of cumulus clouds in vivid contrast to the blue-black far away dome. Nowhere else have I seen the sky so infinitely removed from the earth. Often in America I had heard Carl speak of the African clouds. Occasionally, after a storm and when a strong north wind was blowing, the clouds over the sea at our home in Mystic had suggested the African sky to him; but it must have been merely a suggestion, because the African sky is individual and unique.

One evening just at sunset, as we drove home from 'Ngong at the edge of the Great Rift, whither Carl had taken all of us for a glimpse of what was in store for us, the moon, not quite at the full, hung high in the heavens while masses of deep violet clouds floated everywhere in the eastern sky, rosy red in the afterglow. Later we saw the moon between towering columns of stationary

white clouds, while thin, wispy clouds floated beneath them across the scene like gray mists across high canyon walls.

My first night under canvas in Africa was one to be remembered. It terminated abruptly about three in the morning when I felt my husband's cool hand on my forehead. I looked out of our wide open tent fly to see the world gleaming in white moonlight. The evening before we had watched a full moon rise gloriously in the pink afterglow of sunset. Now I thought I had overslept and broad daylight was streaming in upon us. Then the absolute quiet of the world told me that the dawn was still far away. Slipping into warm woolen clothing, we hastened out to our little light car like two children bent on a holiday. Its cushions seemed icy and the engine was so cold it required urging before it could start. Soon we were moving across the veldt. The moon, still an hour above the western horizon, lighted the world into a brilliant fairyland. Tiny gold and white flecks on the silvery meadows, showed us where the game revelled at their nocturnal meal. Small bands of antelope and zebra they were, on the edge of the Southern Game Reserve. They grazed on grass drenched with heavy dew, each spear rigidly erect, white and gleaming as if stiffened with hoar frost. For nearly an hour we sat and shivered and quietly watched the scene. Soon a red dawn tinged the Moore Hills and transformed the silvery land to rosy pink. Thrilling indeed to me were these fields of Pan. In the past a herd of forty big horn sheep, or thirty caribou had been worth a journey 'north of Fifty-three' to see; but my husband, always charmed by the wild life of Africa, was undeniably saddened by the sight of these decimated herds.

Our work camp thirty-five miles east of Nairobi was on the highest rocky kopje of the Lukenia Hills, 6000 feet above sea level. On the map of Kenya's motor roads this trip appears to be a pleasure drive. Scarcely a month earlier, when we had made our first reconnaissance of this region, the roads had been mere tracks across the veldt, and we had driven the distance easily and quickly. In the midst of the rains our second trip to the Lukenia



Hills was not without vicissitudes. Recurring deluges had made the roads almost impassable, and it was long after dark before we reached camp that night. During the progress of our work there, I was chosen to go into the town to get mail and telegrams, and to prepare for Mr. Eastman's arrival. I drove the little car down the hills from our camp to Athi station. Several times the car went down to the axle in the black-cotton soil and my boys pushed and lifted it out. On account of the heavy rains the roads forbade any attempt to go on to Nairobi. There was no passenger train that day; only a 'goods train' would 'be along.' I drank tea which I asked the Indian station master to give me, and then made the acquaintance of all the trees and birds in the neighborhood. After that I settled down to wait under the tin-roofed station porch, with a hot sun overhead. Cars with settlers from outlying farms began to drift in. A chief of police and his boys trundled up on a hand car. As we were all equally muddy and in ill luck we soon found ourselves in friendly converse, thus relieving amazingly the tedium of waiting.

In the late afternoon the goods train came in and we packed ourselves on the hard wooden seats of the caboose and for the next hour and a half bumped over the twenty-five miles of rail into Nairobi.

There, I rickshawed up to the Motor Mart where I commandeered an ancient car, and, in a downpour, began to do my errands. As it was evening and everything but the bazaar shops was closed, I bought some supplies, went up to my ever hospitable friend and landlady, Mrs. Bessler, where I spent the night. The next day I found telegrams from Mr. Pomeroy asking for a private train for Mr. Eastman. A visit to four or five railway offices, telegrams to Mombasa, the untangling of considerable red tape, and the official sanction was finally secured. A day and evening of errands in the rain, and I started back to Lukenia. The train carried us through flooded fields and along the now completely submerged roadway and landed us in the deep mire of the Athi River station yard.

Later when Carl and I went back to Nairobi in order that he might go to Mombasa to meet Mr. Eastman and Mr. Pomeroy, it was with difficulty that we got our motors through the mud from our camp to Athi Station. From there we were forced to load them on the railway trucks and transport them by rail.

Carl returned to Lukenia ahead of me, taking with him his newly arrived preparator, Rockwell. On the trip between Athi River Station and our camp, their new motor lorry mired in the bottomless black-cotton soil. Although they carried all the rocks in the vicinity to fill in the deep wheel-ruts, although they jacked up the car and the native boys pushed and pulled, the rocks vanished as if in quicksand and the lorry sank up to the axles. Stretching a tent fly as shelter, they put their cots out in the mud, and there in the downpour they spent the night, supperless, on the veldt. The next day they drove in the light car up to camp. Two days later, when I followed them after putting our Nairobi house in order, it was impossible to get a car to the Athi Station to meet me. Carl had thoughtfully sent me a hammock and twelve porters with a note instructing me to allow the black boys to carry me. I, a normal, healthy woman, was not sufficiently orientalized, I thought, to enjoy being carried. There was bound to be some excitement in combating the water-logged veldt—so I waded on foot the nine miles through mud and flooded *dongas* (gulleys) to the lower slope of the kopje. It proved all the exercise I needed, and when I found my husband waiting for me in the little car at the foot of the hill the lift he gave me over the last four miles was welcome indeed. Eventually the recurrent downpours ceased; and after several days of wind and sun we set the boys to work bringing in rocks and brush for building a foundation on which to extricate the car. At last we had a fairly firm road bed and the motor lorry was driven out.

Encamped on the highest kopje of Lukenia, I was ever in an increasingly radiant world. The March desert had become in April a land of luxuriant life and vivid color. Old Geoffrey was clairvoyant when he wrote:

"Whan that Aprille with his showres swoote  
The drought of Marche hath perced to the roote,  
And bathed every veyne in swich licour  
Of which vertue engendred is the flour."

"Oh, don't pitch my tent on that lovely bed of forget-me-nots," I cried in English to our Swahili porters as they made our first camp. It seemed a sacrilege to trample underfoot these and a host of other glowing blossoms. As the porters did not understand my protest, my ground cloth was unrolled, my tent erected, and my cot set on a carpet of blue. I grieved for the fate of these blossoms until I realized that there was literally no tent site where I would have crushed fewer of them. Then I felt consoled, and I was soon revelling in the sense of being at home at last, 'over the hills and far away' from cities, out in a world of colorful atmosphere, landscape and sky. I might have been camping on one of the flower-filled uplands of my long-loved Selkirks, so brilliant was the scene. There at the doorway of my tiny green tent, with all the world rolling away from my feet to a remote and spectacular horizon, I felt myself close to the sky, as if on a high mountain top with an ever increasing sense of remoteness, both sweet and satisfying.

There were flowers *everywhere*. All the cracks and crevices of the erstwhile barren kopje were decorated with green and growing things. Even the two dead-looking sticks in front of my tent, which at first had served me as boot trees, came to life and were a mass of feathery leaves from root to top. Everywhere tiny unobtrusive flowers were blooming and every day the plants increased in size and variety. Each morning as I walked between my tent and the dining fly I could count two or three newcomers. After the first week it seemed as if no more could possibly bloom; the third week in May, five weeks after we first made camp, nearly all the early flowers were still in full bloom and a host of others had appeared. Wee blossoms adorned the creeping vines; great bunches of grass on our camp site were topped in such

amazing shades of purple and pink, rose and lavender, gray and blue, that they looked like clusters of flowers, and through them, as through a misty veil, I glimpsed the real flowers growing in between.

I have found no adequate botany of the country, but there were flowers that resembled spring beauties and hepaticas and buttercups; yarrow in white, pink, purple and yellow; petunias, morning-glories, orchids, verbenas, sweet peas in many sizes and shades; white and pink clover—a flowerage both limitless and indescribable. And from this prodigality of plant and flower, Carl Akeley chose the plant accessories for a group for African Hall—the grass in which the reed-buck feeds, the teasel in which the sunbird disports himself, the bitter aloe and an entire leafless tree which stood beside the rock wall of the kopje and partially framed the scene that the artists were painting as a background for the group. In order that all this vegetation might be reproduced on our return so accurately that the observer would be given an impression of complete reality, Carl instructed his assistants in making careful color notes of each plant chosen; directed the casting in plaster of the leaves and stems; and preserved specimens in formalin.

To see Lukenia and the Athi Plains in April was to understand what the coming of the rains means to Africa. The Athi River, late a tiny stream meandering to some vague indefinite outlet, had become a torrential river, flooding its banks, filling in the back-waters, and giving sustenance for another year at least to the acacias and smaller thorns that outline its devious course. Here too, in the lowlands, every cactus-like plant and prickly shrub brought forth its compensating blossoms of vivid color. Tiny sprigs of green shot up amid last season's dry brown remains, coloring the limitless plains and growing quickly into lush, golden-topped meadow-grass tall enough to hide an occasional, tawny impalla grazing there.

What wonder that my husband had long dreamed of bringing an artist to this radiant alpland to paint from our vantage



point the cloud-shadowed plain and the cloud-filled sky, and permanently to record the old untouched Africa, and the boundless prospect to the north where plains or rolling uplands stretch their vastnesses for one hundred and twenty miles to Mt. Kenya, seventeen thousand forty feet in altitude. Directly in the eye of the sun, on the equator itself, it lifts its glaciated pinnacle from grassy foothills and heavily forested slopes, and displays on its immense and solitary mass all the zones of climate of the earth. In the early morning when the mountain revealed itself for a few brief minutes, we jumped from our warm blankets into chilly clothing, climbed the rock pile above us in the semi-darkness, and in the rapidly coming dawn hastened to get the almost impossible photograph or sketch before the mountain shrouded itself in the inevitable mists.

In the middle distance sentineled El Donyo Sabuk, on whose sky-sheltered summit rest the mortal remains of one of Africa's pioneers, Sir William Northrop McMillan, long the friend of Carl Akeley and of all sincere lovers of Africa.

On such clear mornings, on our southern horizon the dome of Kilimanjaro, more than two thousand feet higher than Mt. Kenya, floated in the blue-black misty space like a colossal snowy cloud tinted in all the shades of pink and rose.

Every evening the sunset over the Aberdares and the Kidong became so spectacular that we all stopped our work to drink in the awesome beauty of the hour. Fleets of ever changing clouds, torn and jagged, splashed with all the colors of the spectrum, sailed dashing across a lurid carmine sky to heap themselves in cataclysmic violence on leaden thunder-heads. Then the whole tumultuous western canopy was cleft by the swift searchlight of the heavens, and earth gave back her answer to the passion of the sky.

Many years ago, when Carl first visited Lukenia, klipspringer, baboon, hyrax, and Chanler's reedbuck dwelt there in abundance. Now for fifteen years this country has been settled by white men. Although reports led him to fear that these animals

had been exterminated in their original home and would have to be collected in regions more remote, still he had resolved that one of his groups for African Hall, historic even before its installation, should present the wild life of a typical Lukenia kopje in its untouched state. Long aware of the amazing rapidity with which the African game is disappearing, and troubled by it, Carl knew that a few years hence scientists would find in such groups the only existent records of animals he had been able to study in the field. The sight of even a few zebra and antelope grazing on the Athi Plains thrilled me keenly. To him, who knew the game of Africa thirty years ago, these small herds seemed but a pitiful remnant playing the last act in a great tragedy.

One day when Bill, our trusty Kikuyu gun-boy, and I were out together photographing the native Wakamba bowmen, we jumped two Chanler's reedbuck which vanished as suddenly as they had appeared and no one thereafter even got a glimpse of one in that locality. Immediately above our camp, a small troop of baboons frequently came down to a lookout rock where they posed for us and played with each other and gave our movements their serious attention. But they were so few that Carl was unwilling to disturb them. Later, it was necessary to make a special trip into the less accessible Kidong Valley with the special object of collecting reedbuck and baboon for the group. Although the hyrax were difficult to shoot because of the squirrel-like celerity with which on our approach, they hid themselves among the boulders for protection, a sufficient number was finally obtained.

Soon after our arrival, to Carl's surprise and delight, he discovered spoor of klipspringer, and after a few days of hunting he secured his first specimen. I now had the intensely interesting experience of observing him, for the first time, while he made his photographic records, took a complete set of measurements, and prepared the skin and skeleton. He had developed a most skillful and painstaking method of caring for specimens in the field,



*Photo. by Carl Aheley.*

LEIGH (RIGHT) AND JANSSON (LEFT), ARTISTS OF THE EXPEDITION, MAKING SKETCHES OF THE BACKGROUND FOR THE KLIPSPRINGER GROUP IN THE LUKENIA HILLS.





A GRACEFUL, ROCK-LEAPING ANTELOPE, THE KLIPSPRINGER, POSING ON HIS ROCK  
FORTRESS TWENTY-FIVE FEET ABOVE THE GROUND

*Photo by Carl Abbey.*



of handling and preserving skins and skeletons for shipment, and of subsequently creating from them his beautiful taxidermic exhibits.

Then, on this, his last expedition, he began the use of stereoscopic photography, photographing first the animal as a whole, then making studies of various parts of the body, head, shoulders, flank, and the delicate veining of the legs. These carefully taken photographs are the greatest aid in giving a correct study of the animal when it is being mounted in the taxidermic laboratory. The stereo plate shows to the eye the relative contours and actual modeling of the animal. Then death masks were made in plaster as a further guide in laboratory reproduction. But most important of all are the photographs in stills and in motion pictures of the live animals themselves, when undisturbed by man. That we should ever gather such rare and desirable records, in view of the scarcity of this little rock-springing antelope, the most remarkable jumping animal in the world, seemed highly improbable.

Then one lucky day on a sheer rock pedestal more than twenty-five feet high and twenty feet in diameter, and with no apparent avenue of approach, I discovered a klipspringer mother and son, peacefully resting and alternately ruminating and sleeping. But how did they get up there? And how did they get down? We resolved to find out.

Their pedestal was surrounded by thick undergrowth and stood immediately under the crest of a long rock ridge. Fortunately, growing on this rock ridge were bushes of considerable size and a few trees. Among these, in the absence of the little animals, Carl built a blind from which we could look directly down upon their look-out rock. Early the next morning, while they were still feeding below, we concealed ourselves and our cameras in the blind and there lay motionless, intently watching for their approach. We had waited about two hours, when with a single flying leap the female sprang up from nowhere and landed on their lofty acropolis. A moment later the little one achieved a

similar breath-taking bound. We could scarcely believe our eyes. Pegasus could have soared no more gracefully than those little wingless creatures in their twenty-five foot leap.

For several successive mornings we returned to verify in photographs what we had seen. Daily about eleven o'clock mother and son sprang up from the tangle of bushes as before and in their secure fortress remained quiet during the heat of the day. Occasionally as a Wakamba herder lifted his voice in song, or as the sharp bark of a dog in the cattle *manyattas* (stockades) cut the air, the little antelopes turned their heads, lifted their noses and flicked their ears; then they continued their ruminating, chewing each cud fifty times to the minute (I timed them) and resting confident in their own freedom from harm. About three or four in the afternoon they became active, moved about the rock, inspected the landscape on all sides, played a little with each other, and then leaped into the shrubbery far below to begin their evening meal. They were so near our camp that the shouting of our boys, the beating of the frying pan—our cook's mess-call—and our own voices were all plainly audible; but they were disturbed not at all. From the blind we photographed them in stills and in motion pictures to our heart's content. We returned regularly, and after a time quite boldly, to watch them, obtaining, so far as we knew, the only motion pictures ever made of klippspringer. We even whistled at them to attract their attention. Subsequently, we walked all around their lookout rock, but could find no possible trail or foothold, which they could use to reach the top. It was so high and sheer that it is questionable if even a hungry leopard could have taken them unaware.

Carl needed still another specimen exactly the type of the mature female for the group, but needless to say, it was unthinkable that one of these trusting little dwellers of the cliffs, who had posed for us so generously should be sacrificed even in the interest of science. Not another shot was fired on the kopje.

Carl now modeled his klippspringer in plastaline, posing them

exactly as they had posed for him, and making a small sketch model of the entire group. He fashioned the rocky foreground in wire cloth and plaster, which the artists painted to represent the exact coloration of the moss and lichen-covered rocks. Next, his tiny plastaline animals were posed on the rocks as he wished to reproduce them. Here and there he placed clumps of vegetation. On the metal background the artists sketched the landscape.

When we broke camp after six weeks of work in Lukenia, three motor lorry loads of collection and outfit were driven into Athi River Station over a muddy trail and there loaded aboard a goods car for shipment to our base in Nairobi. We had done our utmost to assemble the materials from which a permanent record of this historic part of Africa might be created. Those of us who were in Africa for the first time understood how fortunate we were to have come before the country was 'finished,' to have the rare opportunity of seeing Africa through Carl Akeley's eyes; but we had a further and more serious realization of what a colossal task Carl had set for himself in undertaking to prepare on this expedition six such groups for African Hall. His comprehension of this work was so big; our human capabilities so small. Certainly he needed our utmost devotion and we were united in our determination to give it. Here on our first safari, traveling with Carl over old game trails, we caught at least a faint conception of his vision for the great exhibit that he regarded as the culmination of his life's work.

As we reluctantly packed our green linen tents to pitch them again at the 'Gateway of the Northern Frontier,' I realized that I had found in Lukenia the spirit of the Africa my husband knew and revered. I had found Africa still prodigal as when she nurtured her great game herds undisturbed; Africa where the few present day descendants of that long procession of ungulates have struggled against painful odds to persist; where nomadic Wakamba and Masai have warred and hunted and herded their flocks, have built their grass huts and have lived a complete and

satisfied existence; where Roosevelt first witnessed the wild life of a new continent; where other great hunters, Cunninghame and Outram and Selous and now Judd will come no more; and where to-day, only a fragment of the 'Old Guard'—Tarlton and Black and the Percivals—can bear witness to the Africa that was.



## CHAPTER V

### HOUSEKEEPING

THERE is an old adage that nothing is so quickly forgotten as pain. Certainly it is true that after a journey far afield, filled though it may be with many inconveniences or even hardships, all the disagreeable elements fade into the background and there remain only the high spots of experience and the rare thrills of close and intimate contact with unspoiled Africa, its wild animals and its primitive peoples. These thrills are a chapter in a fairy tale, illuminated by unforgettable sunsets and by tropic moons. Through the frequent gloom of thunder-heads and torrential downpours shine memories of a rain-purged earth and sky, of unfolding leaves, of bursting buds, of the fresh smell of drenched earth in the star-filled night.

Even before I went to Africa, I had in thought been translated to a world of romance, though not so beautiful as I actually found. On taking up my duties as a proper safari manager and general factotum, I found myself with many new tasks, the handling of which may be of interest to prospective African travelers. These duties often bordered on drudgery. On his four previous expeditions my husband had usually assumed them and had rarely mentioned the irksome tasks. It may be imagined that the mechanics of African housekeeping came as a bit of a revelation to me.

That Africa requires and affords an indefinite number of servants, personal and general, I well knew. I had, however, imagined a system more or less automatic and wholly unrelated to the problems which confront the average homemaker in America. Indeed, servants were plentiful enough—often too plentiful, it sometimes seemed on payday, or when the entire crew was seized with indigestion or nostalgia; but one thing I quickly

learned, and that is that it takes time, initiative and much firmness to create a working safari of native labor. Although safari transport in Africa has changed in recent years, the personnel of the safari remains largely as in the old days. Native labor falls naturally into two groups, the personal servants and those responsible to the headman. The personal servants include the cook, the tent boys, and the gunbearers, all of whom take orders directly from their masters. The headman directs the porters in packing and unpacking the motor lorries, in making and breaking camp, in gathering firewood, in bringing water, and in such tasks as carrying messages and gathering supplies from native villages. When a large animal is killed as a scientific specimen, two or three porters, dignified by the name of 'skinners,' may be required in removing the skin and cleaning the skeleton. Now that an expedition is transported almost entirely by motor lorry, the number of porters employed is much smaller than in the old days. But when we reached roadless country or when rains made the roads impassable we were absolutely dependent upon our porters. Then the ranks of our East African boys were augmented by recruits from local tribes. The other members of our safari—the cook, tent boys, and gun boys—were closer to us, requiring frequently both personal approval and discipline.

An efficient gun boy is ever at his master's elbow in the field. Upon him rests great responsibility. He stands ready in times of danger with the spare gun. He must be faithful. He is of course a keen tracker and prevents the escape of many a wounded animal. Naturally he ranks above the other boys in an unmistakable caste system.

As a rule we found the East African boy strong, cheerful and willing enough if properly managed. His hours of labor are short, his noon siesta long, and his evenings around the camp-fire, enlivened by stories of adventure, by rough play and by bits of childish humor, are for him the climax of the day. But when his fires become only little points of red in the infinite darkness he lifts up his voice in eerie serenade. Melodious and in minor

key, accompanied by a calabash lute, his snatches of song and his minstrelsy are a part of Africa you will long keep in dear remembrance.

All African natives are just overgrown children. Our black boys often required as much care and supervision as one would give a child. A big six-footer would come to me holding out his finger with a little thorn in it, crying, "*Obe, Memsahib, bia sana,*" (Oh, madam, very bad), and begging me to remove the offending briar. Or he would clasp his 'tummy' in both hands and bend double, whining, "*Gonjwa sana, sana,*" (Very, very sick), and craving *dawa* (medicine). Often when they had turned in for the night and their incessant bedtime chatter forbade all civilized sleep, I would go to my door and shout, "*Bas kelele*" (Stop that noise). Followed a meek "*Ndiyo, Memsahib*" (Yes, madam) and prompt obedience. I was, indeed, *in loco parentis* to the whole family.

The cook under direction prepares the food while his assistant, or kitchen *toto*, makes his fires and keeps them going. He also cleans all the pots and pans, washes the cook's clothes and does all a scullion's disagreeable work. One *toto* in particular, Poli, a slim, bare-footed, childish-looking Wanyamwezi whom I signed on for our first safari was the happiest kitchen boy I have ever seen. He was quite wild and unspoiled. He proved during a period of twelve months so diligent, unselfish and trustworthy that after we left the Congo, I made him my tent boy and he remained with me until the end of the expedition.

By far the most important of all the boys from the standpoint of the daily welfare is the cook. A good cook—and I had two excellent ones—who can cook, as they say, 'in the English way,' is a gift of the Red Gods. A poor one—and I had that encumbrance, also, when every palatable dish for our table I was compelled to prepare with my own hands—is by the same token an incarnate imprecation. Even my best cook needed much praise and certain indulgences. In order to keep him up to high standards I planned all his menus.

Each morning after breakfast, I arranged with Mwanika, the meals for the day. He was always ready to carry out my orders and frequently had excellent suggestions. To one accustomed as I had been by many long expeditions in the north, to the simplest diet of cereals, bacon and dried fruits, this African menage was a never ceasing wonder.

On my husband's birthday, I decided to give him a surprise party. The cook and all the tent boys entered into the spirit of the occasion by preparing a most elaborate meal. I made a large birthday cake, and Mwanika helped me bake it, guarding it as carefully in the small tin oven over the open fire as would a proper cook at home. For us he prepared relish, soup, roast meat and chicken, one or two vegetables, potatoes and pineapple and nut salad. Jansson sketched little commemorative place cards for each of us and Leigh gathered and arranged most gorgeous bouquets. Raddatz helped me mix the drinks. Of course I had only small white lantern candles for the white frosted cake, but it made a fine show in its garland of flowers and everybody was very happy. That evening, the nineteenth of May, lifted some of the work strain from every one's head and heart.

To my great surprise in Africa I had to keep all food supplies under lock and key and to ration out the food for each day, designating what should be used for each meal. I had been told that my own personal boy could relieve me of this rather uninteresting task; but after trying him for three or four days, I became aware that I was catering not only for my family of six but also for my cook and personal boys as well. Never before in my dealings with servants had I been required to police the staples of sugar, tea and flour.

I granted indulgences to my cook by allowing him small portions of tea, sugar and milk for his own use. However I warned him that if there was any stealing whatsoever, or if he gave food to other members of the safari, his own supply would be cut off. This plan worked well. He became a watchdog and our stores lasted as they should. However, unless there is a rationing of tea





*Photo, by Mary L. Jobe Akeley.*

MWANIKA DEvised A KITCHEN IN WHICH ANY CAMP LOVER WOULD DELIGHT.



*Photo, by Mary L. Jobe Akeley.*

MWANIKA'S BREAD WAS HIS PRIDE.



and sugar, you may be sure that a pound of tea will last six people not more than three days. The African native has a passion for tea, which, I believe, in the majority of cases even exceeds his appetite for spirits.

Much of our food was tinned, fool-proof and tasteless, but our cooks prepared the fresh roasts and curries extremely well, and their bread was excellent. In our Lukenia camp my cook, Mwanika, discovered a hollow rock which he adapted for bread baking. He dug out the earth and kindled his fire inside. After the rock became thoroughly heated and the fire had burned low, he baked as delicious bread as I ever tasted. His device was similar to one of our old fashioned 'out-ovens.' Mwanika also devised a kitchen in which any camp-lover would delight. To windward stood a great rock some twenty feet high. From this stretched, as a canopy, one of our large green linen tarpaulins. Thus his kitchen, protected from wind and weather, was open on two sides for easy serving to our dining fly. Later when his rock oven cracked as all superheated rocks will do, he improvised an oven of petrol tins in which he baked over hot coals.

Mwanika's bread was his pride. One afternoon he came to me with a request, half English, half Swahili, which I could not understand. I thought he wanted an empty petrol tin and gave him one. But it was not what he wanted. "Oh no," he said in Swahili, "just wait," and came back quickly carrying in each hand a piping hot petrol tin containing two beautifully browned loaves. He wanted me to bring my camera to the kitchen and photograph him and his specially fine baking.

But all has not been said about the environs of Mwanika's kitchen. In the passage between it and the dining fly, our boys set up a table constructed of small poles thatched with long fibrous grass. On this the plates were served, the dishes washed and dried. From the kitchen led the boys' private path to a cave-like rock in which they kept their personal stores of mealy-meal, meat and the *ghi* (drawn butter) brought to them by the Wakamba women from the plains below.

I have not seen the ordinary reflector in use in Africa; in fact, owing to the scarcity and quality of the wood it is scarcely feasible. Nor have I seen the iron Dutch oven such as is used so effectively in the High Sierras. This I am sure would be a decided asset to the culinary department. Nearly all baking and roasting is done in a sheet iron oven, a heavy deep pan with a tight cover. On first glance it seems highly impractical, but in reality it is a very useful utensil.

I added a steam pressure cooker to our equipment for our camp among the high volcanoes of the Kivu. It solved the problem of cooking when living two miles above sea-level.

My African cooks proved far better than any white cooks I had ever had in the field. They are rarely bad tempered. Even under the worst conditions of making a new camp daily their cooking is extremely good. They were cheerful when the fuel was inadequate and when the fires smoked seemingly past endurance. When they had to prepare substantial dinners after nightfall, they did it as a matter of course. One of the difficult problems of house-keeping on safari is the preparation of lunch for the next day's long journey. When camp is made at nightfall after one has motored perhaps one hundred and fifty miles over the rough veldt, it requires ingenuity of both cook and mistress to devise an appetizing lunch which can be put up either long after nightfall or after breakfast the next morning. These are times when one wishes that one hour might be expanded into two.

However arduous the culinary tasks of the previous night, however wearisome the trail, Enoka, our cook on the journey to the Kivu, walked well toward the head of the procession in order that he might have his fire going and the meal under way when we came into camp. When we traveled in the blazing sun until three or four o'clock in the afternoon, he cheered our arrival with hot tea or soup, bread and butter, jam and cheese. When we took up the trail at daylight and made camp in the heat of noon, he was ready with a substantial luncheon. In the evening he prepared for us a dinner worthy of the name. No sooner had he finished



preparing tea or lunch, than he began to set his sponge for the evening bread baking. While the porters sang and joked, he was busy kneading the dough and shaping it in comely loaves. Many times I was awakened by the clatter of tinware after I had been asleep an hour or two. The faithful black boy was removing his baking from the oven at midnight.

We never dared ask where the yeast for this proper white bread originally came from, but it certainly was one of the treasures of our safari. In a bottle, marked 'Extra Dry' and with its wooden cork wound round and round and tied down with string, he carried his 'start' wherever he went. Beneath the noon-day sun, it seethed and sputtered like an imprisoned djinn, pushing at the wooden plug, straining at the confining cord, and taxing Enoka's ingenuity as a jailer. One particularly warm day, when the yeast had been subjected to unusual agitation, it won its fight for freedom. I came upon Enoka, grinning sheepishly beneath a thatch of black wool and sticky sponge. He was wiping the sour smelling stuff from his face with one hand and corking the erupting bottle with the thumb of the other to keep captive a remnant of the powerful leaven.

Each member of our party had his tent boy. These boys brought us our bath in the morning, cared for the tents, made beds and tucked in our mosquito nettings with utmost care. They know that 'mosquitoes make the white man sick.' They carefully mended and laundered our clothing, kept the mess-tent neat and clean and the wire-screened food safe in order and acted as butlers at meal time.

It is not desirable to note that while your tent boy serves you at table he always carries the dish towel over his shoulder no matter how soiled his jumper may be. Where the towel reposes between meals is another matter to be ignored. If you give him plenty of soap and actually see him using it on his dish cloths they may be fairly clean; but unless you do watch this process you may be sure that he will use the soap only to wash his shirts and socks. The one incessant demand of your boys is for *sabuni*

(soap). When you give them soap for your own laundry there is never any left. They covet it and hoard it.

"You boys must eat soap," was my stock remark when because our supplies ran low or their requests were unreasonable I had to refuse them. My trite comment always produced a laugh. I was certain that they had plenty of soap stored away.

The personal boys, if diligent, thoughtful and competent, can be of the greatest assistance and comfort on an expedition. In the morning, a few minutes after you have heard the ring of the kitchen boy's *panga* (ax) you will be aroused by the tinkle of a tea cup on the little table or chair beside your cot, and a soft "*Jambo, memsahib*" (Good morning, madam). There has been no clatter of entry in your tent, because your boy knows intuitively that this hour of earliest dawn is no time for a bugle call. Our rest hours were cruelly curtailed by enforced late retiring and early rising, so that the steaming hot tea was indeed a life saver, giving us the courage to bathe and dress for another day.

Many of the East African boys are Mohammedans, and to them the washing of their master's or mistress' clothes is a fetich. They seize your garments, only temporarily laid aside, and plunge them in stream or wash basin at most inconvenient times. When leaving camp they pack your bedding and dunnage bags and the few little boxes which contain your small luxuries for the field. Usually, if told not to do so, they refrain faithfully from touching any box holding important papers or money. In more than a year in the field, I never had a shilling stolen from my boxes and all of my personal belongings were given conscientious care.

One of the most serious housekeeping tasks in Africa when going off on a three or four months' trip into the blue, is to have all of the essential articles of food and a few of the luxuries. The management of the commissariat of such a safari is a big job in itself, and means a careful inventory of the chop boxes, and judicious purchasing.

It was amazing how much time could be consumed in planning food supplies which should be appetizing, and in listing them so

that during a long trip of seven or eight days it would not be necessary to unpack more than two or three boxes. I finally evolved a system of emergency boxes for immediate use, and reserve boxes to be opened only at the permanent camp. It is both a problem and an art to put into emergency boxes all that is needed for a family of six or seven, and also imperative to see that the emergency boxes are packed in the back and not in the center of the load. This required infinite patience and watchfulness, because the boys who pack are only eager to fill up the lorry, and unless you stand over them they are almost sure to make a mistake. I chalked large red and blue suns on each of the emergency boxes and these symbols after a time actually struck the boys' fancy with the result that these boxes were always within reach.

Our first few months in the field were comparatively simple, as we had our original chop boxes from London to draw upon; but soon in spite of elaborate care in ordering there were certain articles of food which were not enjoyed, and others about which every one was extremely keen. Therefore in the two or three days between our different safaris when we were in our base in Nairobi, all of the chop boxes had to be thoroughly overhauled. Then came the purchase of new supplies from the excellent local market, including as many non-perishable fruits and vegetables as could be safely transported.

Mwanika was a delight in the markets. Never once did he forget he was buying for his mistress. No shop keeper, Indian, or Kikuyu could get the better of him. He got the best cuts of meat, the freshest vegetables. If asked an exorbitant price for anything he whistled his disgust and stared the vendor into fairer dealing.

During our brief sojourns in Nairobi, the vegetable plot of the four acre garden that embowered our base house gave us welcome respite from tasteless tinned food and spread a friendly feast for the timid wild creatures of the neighborhood.

The birds, nesting in increasing numbers in high cedar or in branching guava, feasted in my garden. Shrilly calling in the

early morning or in the late twilight, flocks of colies flew from tree to tree, their long brown bodies and plume-like tails resembling little kites floating and drifting in the evening breeze. Although our raspberries, guavas and our loquits quickly disappeared, we never begrudged the birds their share.

And when the twilight fell not only the birds but all the little creatures of the garden and the fields sought out our *shamba*. Shrill-voiced crickets, and myriads of other little creatures, whose names I do not know, held conclave. Perhaps the weirdest and wildest of all the sounds was the voice of the fruit-bat as he poised after feeding on a near-by guava tree or flew about my windows throughout the night. His note was like the ringing of a tiny silver hammer on a silver anvil, intermittent and unrhythmic as if produced by a fairy blacksmith. It has some of the quality of the veery's song in the late springtime in our own hemisphere, but it lacked all of its sweetness. It began vigorously and protestingly as if some intruder had suddenly startled it from its sleep. Then it died away to the faint tinkling of a bell in the distance.

Two or three of these outbursts occurred with their attendant decadences and then all was still. Then after a long time when I was perfectly sure that all the fruit-bats in the garden had tucked themselves in for the night and were on their way to dreamland, the whole performance began again with its original vigor. Although this *shamba* carillon of the fruit-bats was not conducive to sleep, yet I would not have missed it for all the world.

The crowning glory of my kitchen garden was an acre of pineapples, hedged in by bamboo and banana trees. On one side was a good-sized plot encircled by a hedge of scarlet geraniums. In this I had great fun after the rains because I purchased packets of garden seeds and planted them profusely. In three weeks' time I had little juicy turnip radishes, and later on came beans and beets, spinach, lettuce and many rows of peas. These made a brave start and grew three or four feet tall over the brush which my *shamba* boy placed for them. But invariably when the pods were filling out and I anticipated an appetizing vegetable for my din-



ner, I would go out one fine morning to find many tracks of a little red duiker up and down the rows and the vines nibbled clean of blossoms and pods. Once when I was sitting on the front veranda with the electric light of the house shining out in a broad band across the rose garden, the little duiker vaulted into view, skirted the band of light for a little, then stepped boldly across it without fear as if he were crossing an open glade in the moonlight. Then he trotted back to my vegetable garden where the peas were ripe for picking. I knew he was enjoying his feast. Although prepared for him at the expense of my time and energy, I should certainly have been lacking in hospitality had I driven him from his evening meal.

## CHAPTER VI

### THE GIRAFFE HUNT

It was my first long hunt for a notable and noble animal. Our green canvas tents were pitched in an acacia grove on the bank of a sand river ten miles beyond the palm-fringed waters of the Northern Eusso (Uaso) Nyiro in the desert of the Northern Frontier of Kenya Colony. Here, as my husband had expected, we found that unreal creature that by some mischance has been brought into our modern world—the giraffe.

To the north, twenty days' trek by slow-moving caravan, was the Abyssinian border. Spread before us, to be reproduced on canvas as the background for the Water Hole Group for African Hall, was the scene, historic in landmark and primitive associations, which the old timers frequently refer to as 'The Gateway to the Northern Frontier.' Beyond a water pan shadowed by big acacia trees the gray veldt stretched out to a far horizon line, built up of spectacular mountains; one with a great rampart, sheer and impressive, another cathedral-shaped, and all extending back into a great blue mysterious *beyond*. Through this gateway Somali herders and trading caravans have come and gone for generations, in intermittent contact with the south. Beyond the mountain wall even to-day Abyssinian bandits plunder and kill. In this desert country, with alkaline water holes from twenty to sixty miles apart and with nothing but thorn vegetation, where toward the middle of the dry season many of these water holes and pans become only sun-baked clay, white men have not been lured to investigate, to remain long and to despoil. Native wandering herders, the Samburu, of splendid physique and gentle manner and with the suggestion of the Egyptian in physiognomy, are the only inhabitants of the section. Here, protected by the desert, a few fairly large herds of game still survive to suggest a



*Photo. by Carl Akeley.*

THE GATEWAY TO THE NORTHERN FRONTIER---THE HISTORIC SCENE CHOSEN AS THE  
BACKGROUND FOR THE WATER HOLE GROUP.



A FINE RETICULATED BULL GIRAFFE—A NOTABLE AND NOBLE ANIMAL OF  
NORTHERN KENYA.

*Photo. by Carl Akeley.*



wild life and an untouched domain amazingly and unfortunately rare in Africa to-day.

Motors have taken away much of the romance of the long foot or camel trek to the Northern Frontier, but they bring one quickly into remote regions not yet spoiled by the great influx of men. Leaving our expedition base in Nairobi, our headman proceeded by motor bus to Fort Hall, accompanied by twelve porters. From there, as he put it, he 'walked them on their feet' twelve miles to a camp site which Carl had indicated for him beyond the Tana River. Our own motors overtook them there shortly after nightfall. The next day we traveled across the foothills of Mt. Kenya, through the reserve of the Kikuyu natives where they cultivate great fields of maize and beans and bananas, through Nyeri and thence on through a strip of the dense Kenya forest, to the little settlement of Nanyuki surrounded by golden meadows of tall-growing grass over which floated thousands of Jackson's dancing birds—dark, velvety, iridescent birds, with long graceful tails. The roads still showed traces of the long heavy rains and just beyond Nanyuki our progress was severely retarded by a swamp which we had to bridge by a corduroy of brush and logs.

All the way down through the dense Meru forest, elephants trumpeted. A band of monkeys—I counted sixty—swung from limb to limb along the roadside. Gray parrots with splotches of red fluttered in and out among them. At the foot of the long slope leading into Meru hundreds of natives awaited the arrival of our party. The women had painted their faces white and were dressed in dark-colored skins adorned with chains of beads and shells. The men wore scant draperies of skins or blankets and carried beautifully fashioned spears.

On the third day as we approached Isiola we first glimpsed an abrupt mountain wall rising forty miles away beyond the Eusso Nyiro, and knew that we were approaching the region where my husband would collect the specimens required for his Water Hole Group—oryx, Grevy's and Grant's zebra, Grant's gazelle,

and, last and paramount, the reticulated (northern) giraffe.

For sixteen days, we rose when the world was bright with moonlight, or long before the stars had dimmed; and when the western hills were still veiled in morning twilight and the eastern sky but faintly tinged with dawn, we journeyed out on the blue-white veldt to watch till sunrise the game remaining there. Our errand was made doubly hard by the realization that this was one of the last unmolested regions in a country made largely desolate by the slaughtering horde. Gladly would we have played with these animals and left them only with vivid memories and regret, had there not been the desire to perpetuate them in African Hall.

The oryx, the Grevy's and the Grant's zebra, all have their charm. They stand out on the landscape with spectacular interest. But the giraffe eminently belongs to a remote past and seems strangely out of place in this world of man-made trails and motor cars. I had my first glimpse of this survivor of prehistoric times just at sunset, when we were still twenty miles southeast of the Eusso Nyiro. It gave me an indescribable thrill. There, in plain sight among a few acacia trees was a herd of fourteen giraffe. They all looked astonishingly big, although, as I recall it now, one bull of considerable size dominated the herd. How queer they looked, poised on the edge of a low ridge twisting their long necks at our approach and gazing in wonder and amazement. It was only when we came very close indeed to them that they gave ground and leisurely loped away.

To the sportsman who may be permitted a giraffe, I am sure any giraffe will look big. He takes one of the first he sees and consequently pronounces his hunt both easy and successful; but when a naturalist is looking for the very finest specimen of its kind, it is indeed another story. For sixteen days my husband studied the northern giraffe. We often saw small herds and his methods were invariably the same. A grand old bull, a large mature female, and a calf were the specimens desired, and so he studied the herds from the standpoint of these requirements. Are the bulls and the cows

really of suitable size or are they large only in relation to the smaller members of the herd? This was the absorbing question. Often we would see a bull that had every indication of measuring at least sixteen feet, but my husband was unwilling to shoot it without actually knowing its height. He would not kill one of these rare animals needlessly. His method was to locate an animal feeding on an acacia tree, then to stalk him, and after the giraffe had moved on, to measure the limb on which he had been feeding. This he did by means of a string and a weight attached to the end of his gun barrel.

Rockwell, Carl's assistant, brought home a rather large calf early in the game, but finding the old bull was a more difficult matter. Philip Percival, who had been in this same camp for a week directing Mr. Eastman's hunt, had reported a fine old gray bull. We kept on the lookout for him, though Carl had his heart set on getting a dark bull giraffe. We had hunted a week when he secured the female, and no bull of real importance had been seen in any herd. We were seeing giraffe in considerable numbers. In the day's hunt it was possible that we saw the same groups twice. For a long time we saw females—'*Mingi, mingi sana*' ('Many, very many,') in the native vernacular—females and calves, everywhere it seemed and with them only an occasional young bull not at all impressive. Still we went out at dawn and hunted our course, came back with the hot sun of high noon radiating from our helmets and with eyes literally bulging from studying the dazzling landscape with our binoculars. At such an hour all the animals became distorted in size and young calves assumed the proportions of their grandfathers. We hunted from four o'clock on until the twilight shut out the gun sights and the landscape.

Finally, one evening half an hour before sunset, as Carl and I were coming along across the open veldt with one of our boys, we sighted a lone giraffe feeding on a large isolated acacia tree. He looked enormous and was not the old gray bull. He was unusually dark. In fact, as he stood against the western light, he

looked almost black across his withers. My heart raced. Much as I hated the thought of killing, I found myself wishing that my husband might be convinced that here was the specimen he was looking for, and have done with the long strain of hunting and waiting and disappointment. The bull was alone. A small bush was near-by and consequently he was in an excellent position for stalking. He looked at us in wonder and then continued to enjoy his evening meal from the top of the acacia tree. But how high is the tree? The eternal question. That tree may look high, but how high? And a giraffe of less than sixteen feet was not even to be dreamed of as a member of this, perhaps the most important group of African Hall. We said little.

"He looks big," cautiously from Carl.

"Yes, and he is *very dark*," I added, warily and still hopefully.

"Well, I think I'll go up and measure that tree."

Of course, the giraffe could not be expected to be obliging enough to wait to be measured and then fall victim to our desire. And yet that almost happened. Carl stalked to within ten yards of the tree and the giraffe fed on. Then he came out into the low scrub and the giraffe stopped eating, looked, came a few steps in his direction, then turned his long gracefully sinuous body and slowly walked out of sight. I kept watching through my glasses. He was obviously a most gloriously dark animal and almost pure white underneath—a very individual marking and wholly different from anything we had hitherto seen at close range. How huge he looked under the tree and how increasingly huge and dignified as he walked away with head high up in the air! I wondered if on close approach Carl could resist shooting; but he did and I next saw him with gun and cord measuring the limb the bull had been feeding on. He came back presently.

"He *was* a big giraffe—that branch he was feeding on was more than seventeen feet above the ground," he reported. Of course, we were both depressed at the lost opportunity but thrilled at having seen so closely such a splendid animal.

Now my husband's constant quest was the big black bull.





MR. AKELEY REPLENISHED THE WATER IN A WATER HOLE AND THE ANIMALS CAME AGAIN TO DRINK.

*Photo. by Mary L. Jobe Akeley.*



Again and again we covered the same course. We wore out the tires of our light car and I began to drive the heavy truck. But the big black bull was not to be found. Then one day in the thorn scrub near the road made by heavily-freighted ox-carts that pass year in and year out from Archer's Post to Marsabit and Moyale, Carl got the female for his group. There was no mistaking her. She stood in statuesque wonder, alone amid tall thorn and acacias. She proved a superb beast of exquisite color, gaudily marked and with the deep scar of a lion's claws the entire width of her beautiful flank, a scar considered by my husband to add untold value to the specimen.

I drove posthaste to bring the taxidermists to assist with skinning and skeletonizing. On my way back to camp I saw what seemed to me the giant black bull feeding with a herd of fourteen females and young males near the spot where we had first observed him. But the female had been killed and if its skin was to be properly preserved, no time could be lost in its preparation. The old bull had wisely chosen to reappear when all hands were fully occupied.

The next morning, as I took the painters, Leigh and Jansson, to the water pan, where they were making studies for the background of the Water Hole Group, I saw the bull again, but by the time I could get Carl the herd had vanished and with it its spectacular leader. Later it seemed a last appearance. In fact, all the giraffe in the country suddenly effaced themselves. The water pans had dried up and the Samburu told us the giraffe were watering at the river. The giraffe water here only every third day. Now the chance of finding any herd en route to or from water at the particular moment when we happened to cross a particular section of landscape, was remote indeed.

We had been hunting nearly two weeks. For the past few days we had seen next to nothing. Then one morning another large male stood for us for a brief moment and quickly vanished into the scrub. He was so imposing that we spent four hours aggressively trailing him. On this hunt, my real job began. I had had

rough driving in all the days of the hunt, but now for the first time I literally tore through the high thorn scrub. My truck knocked down trees three to four inches in diameter and I drove over thorn bushes as wide as the car and four to five feet high. I stopped only once and unwillingly when a thorn-pierced flat tire stalled the car. It was wild driving and wilder country but it had to be done. Devil's clubs and alder thickets are greensward in comparison. I could see my way perhaps three car lengths ahead and after that I went on faith. The giraffe eluded us. We got a glimpse of him once, but he was far away. We all came home with arms and faces bleeding from the thorn scrub, very hot and soul weary.

Finally my husband decided to try a new move.

The water pan one mile from camp, at which all the animals on the veldt had been drinking, had dried up. Now was it not reasonable, he argued, that if the water in the pan were restored the animals would come to drink again? He decided to make a new water pan. Near our camp was an ancient well of saline water, walled up with excellent masonry. It was apparently inexhaustible. The passing caravans used it copiously and we had an abundant supply for baths, laundry and dishwashing. Makasudi, our headman, informed us that we could easily fill the two thirty-gallon water tanks used to transport our drinking water from the Eusso Nyiro, without missing it.

That afternoon we filled the tanks and took them and our porters over to the pan. With *pangas* (native knives) they cut out a hole ten feet square and twelve inches deep. In this we placed a big canvas tarpaulin, covered it with a thin layer of the dislodged clay and then removed as nearly as possible all traces of our work. We poured in the sixty gallons of water. It actually made a fairly decent water hole. The next morning we found that a few animals had come to drink.

That evening, hoping that our improvised water pan would attract more game, we hunted towards the north along our usual



course. About four miles beyond the water pan we suddenly saw a herd of fifteen giraffe and in it was a most impressive bull. He was unusually colored and, somewhat disconcertingly, very gray with pure white markings. It could easily have been the one Philip Percival had remarked. Our big dark bull was not in the herd. Carl was in a position to stalk so he slid out of the car, hid behind an ant hill and slowly crept closer and closer. He was going up wind and by dint of careful maneuvering he got very near the bull. Now, the difficulty of stalking a big bull in a herd is that every female in that herd constitutes herself a committee of one to look after the safety of her lord and master as well as of her offspring. The bull may feed unconcernedly, but you may be sure he is being guarded by as many pairs of eyes as there are females in his family. In the course of Carl's stalk the animals became aware of his nearness and ambled off.

It was time for us to return to camp for supper, but my husband was determined not to let another fine specimen escape and, in spite of the lateness in the day, trailed the herd far afield. Swift twilight came, darkness fell, and he did not return. I distinctly remember my uneasiness as I waited in the truck, peering into the thickening night. Rockwell chaffed me for being nervous, but I do not believe that I was needlessly concerned about my husband for there were few landmarks on the great veldt and plenty of lions. To be plodding his way across the darkening desert could not have been pleasant even for a seasoned and experienced hunter, and Carl Akeley never spared himself. By such disregard of self he secured the finest possible specimens and earned the satisfaction of knowing that he had never killed wantonly.

Hoping to guide him in our direction, I turned on the car lights. To my despair, they were cut off almost instantly. My batteries had run down. After what seemed to me an interminable wait, there in the increasing darkness, he came in sight. The lights had burned just long enough to give him his bearings and show him where we waited.

As we drove home without any lights, Carl said:

"Well, that old fellow will satisfy my every wish. I got very close to him but it was too dark to see my gun sights."

The next morning we traversed the same course, hopeful that the same herd might still be ranging there. We scanned every possible section of the range, but not an animal of any sort or description was in sight—not even a Grant's gazelle moved on the landscape. The place was as deserted as a desert is supposed to be. It really seemed hopeless. I inwardly confessed to a very sick feeling. Were we to be defeated in the end?

"Well, we'll go on the usual course," my husband said.

About a mile farther on, we sighted giraffe. On close study and on nearer approach we saw a fine big bull. He was unmistakably large. A half-dozen females ranged around him feeding on the lower branches of the trees. He towered among them and fed from the tree tops. I was thrilled almost past breathing. I knew Carl's heart had been set on the big dark bull—this one was dark indeed. He seemed strangely like the solitary bull that we had seen previously and that he had so carefully measured the week before.

At last my husband's painstaking efforts were rewarded. The big bull, now at close range, appeared colossal in contrast with the young bulls and females. He actually stood for us. Two shots, a short run of five hundred yards, and the old monarch's reign was finished forever.

The rest of the herd stampeded for a short distance only, and then traveled slowly away, stopping frequently to look back for their missing chief. Distress, dejection, amazement that this thing could have happened, were all depicted in their movements as they reluctantly left the spot where their leader had fallen. I doubt not but that they came again and again at nightfall to look for him.

Carl and Rockwell now made photographic studies and measurements of the giraffe, so essential as records for the correct mounting of the animal in the taxidermic workshop. He was a little more than sixteen feet in height! Meanwhile, I dashed back



*Photo. by Carl Akeley.*

THE FEMALES IN THE GIRAFFE HERD ARE EVER ALERT THUS MAKING THE PROBLEM OF STALKING A VERY DIFFICULT ONE.





CARING FOR THE SKIN OF A GIRAFFE IS ONE OF THE MOST DIFFICULT JOBS IN THE FIELD OF TAXIDERM.

*Photo, by Carl Akeley.*



six miles to camp for Raddatz, who came in the truck bringing with him a tarpaulin, four hundred pounds of salt, extra skinning knives, and all of our porters. A terrific day of work was ahead. The trip both ways took forty minutes.

Now caring for the skin of any giraffe under extremely favorable circumstances is one of the most difficult jobs in the field of taxidermy. It is precarious work because of the large amount of water the skin contains and the consequent tendency to rapid disintegration, which may mean the 'slipping of the hairs' on the skin. As the female giraffe had been killed shortly before sunset, the skinning had been completed at midnight. These were the best possible hours for the preservation of the skin.

But now it was ten o'clock; the veldt was already shimmering in blazing heat and the hottest hours of the day were still to come. It was a herculean task. The tarpaulin was quickly thrown up as a sun-canopy protecting the giraffe. Carl and Rockwell had been skinning for nearly an hour, but the amount of work accomplished seemed only to increase the size of the giant. Although the force was now augmented by Raddatz and four or five of the best native boys, the task was heavy indeed. As soon as a square foot of skin was removed, salt was rubbed on both sides for the extraction of the water. Other porters, as soon as the muscles were exposed, removed the flesh.

Hundreds of vultures hunting high in the heavens had descended almost the moment the giraffe had fallen and were now grouped in the trees and on the ground, awaiting their turn. So the native Samburu with an instinct equally uncanny, had suddenly foregathered in scores and were now standing or squatting in a circle eager for their share of *twiga* (giraffe), the meat 'that makes them strong.' I commandeered a half dozen of them to cut and carry in loads of grass for the protection of the skin while it was being removed and for a cushion and cover for it in its transit back to camp. They complied with my request after much coaxing and urging, and I had to stand over them to keep them on the job. Their fires were already kindled and the moment the

redolent flesh was removed they charred it a little until it became still more odorous. Then, singing and laughing and squabbling they ate enormously.

In such an environment and in the sickening heat of high noon, Carl and his two men had little appetite for the tea I brewed for them, but with it and the biscuits and cooling tinned pineapple they were refreshed and sustained in the worst hours of the day. After eleven hours in the field and six hours of grilling, back-breaking preparatory work, the specimen was loaded in the truck at four o'clock and taken into camp for the completion of the skinning of hoofs and horns and for the resalting of the skin. The men gulped their afternoon tea as they worked; they paused only for a brief half-hour at dinner, and then the lanterns were lighted and the work went on.

All the following day the work continued. At last the giraffe skeleton was clean and hoisted high in a big acacia tree out of reach of marauding hyenas; and that night we all gathered silently around the work-fly where, by the light of half a dozen lanterns, Carl and Rockwell and Raddatz were still doing yeoman service in making the big bull giraffe skin into the nearest possible approach to a piece of velvet; and Kambi, tall handsome Wanyamwezi, sang, in a childish voice, a hunting song to the minor accompaniment of a one-stringed guitar—a requiem for the fallen prehistoric giant.

## CHAPTER VII

### BY THE WATER HOLES

AT the end of the rainy season the turbid alkaline waters of the Northern Eusso Nyiro flow in swift rapids and in broad deeps toward the Lorian Swamp. Thence the river's course is uncharted to the Indian Ocean. After a long drought it is in many places only a shallow stream that dances across the desert; but its waters never fail, for back of it rise lofty mountains which remain forever its well-spring.

Along its course are tributaries, rivers of bottomless sand, twenty to two hundred feet wide and during most of the year as dry as the Sahara. After a terrific tropical rain storm, drenching hill and plain, these sandy river beds carry torrential floods, and at such times pour into the Eusso Nyiro. Often after an hour's rainfall the rushing column of water is three feet high. When the flood following the cloud-burst subsides, the sand river becomes only a soft and shifting mass. Then held in an occasional clay pocket in its course are pools of sweet water which for many weeks supply both man and beast. These are the desert water holes.

Back from the rivers, in the plains are found occasional beds of hardpan impermeable to water which catch and hold a portion of the tremendous downpour. Like small lakes they remain for a month or so at least after the cessation of the rains, and become eventually only red splotches of sun-baked clay in the midst of the sandy, thorn-infested waste. These again are water holes, often more appropriately termed the desert water pans.

During the rainless months, the wild life of the veldt is dependent upon these water holes. Rank-growing acacias or clustering palms mark their whereabouts, and the animals from miles around travel to them nightly to cool their dusty throats. From

the same water holes where giraffe and oryx drink, nomadic Samburu, this desert's only native inhabitants, fill their calabashes, water their humpbacked cattle and bathe their shining sinewy black bodies. It is a land of peace as far as primitive man and beast are concerned. The Samburu, living on the milk and flesh of their cattle, sheep and goats, raise their long, easily bent spears of native soft iron only against an occasional lion interested in their flocks. But the peace of the desert is not without its conflict. Man and beast alike in their struggle for existence must combat nature in their search for water. They must dig deeper and deeper into the mud of the water pans as the drought descends upon the land and inevitably, in the last weeks before the rains, they retreat to the river basin where the impoverished Eusso Nyiro crawls through the sand.

My African diary records impressions of our first camp in this still primitive part of Africa. Written sincerely and thoughtfully, from time to time during our month's sojourn on the Northern Frontier, I add these impressions here without change:—

We came into our camp at the Wells two weeks ago. The long lush grass on our sand river's edge, phenomenally thick because of the heavy and unusual rains, has begun to turn brown, and the whole camp area has the appearance of a wheat field ripe for harvest. In contrast the acacias are brilliant green. Their long graceful branches, their compact thorns and feathery leafage form a thin shade that is welcome indeed and give to our camp an appearance of friendly security. A few are bursting into masses of pale yellow bloom hiding entirely their poisonous thorn daggers. I often look at these trees—and fortunately there are many of them—and think how like they are to the great sprawling apple trees in some ancient orchard. It is impossible for me to realize the barbed hostility of their spikes. They are only benevolent shade, and the winds that blow for many hours of the day and night through their branches make music always sweet and soothing.



This northern Kenya—'the Gateway to the Northern Frontier—' has a beauty wholly different from the loveliness of Lukenia. There I was reminded of the flower-starred uplands of the Rockies and the Alps. Here, where sweet dry winds stray down from the summit of Mt. Kenya, seen on rare days gleaming high in the southern sky, I feel in a world apart from any past experience, and yet I feel so completely at home.

On all sides are mountains. Some, near at hand, are dark bluish green with dense forestation. Others, far away, are just great upheavals of luminous opalescence. At sunset and at sunrise all the colors in the artist's palette run riot everywhere. But beyond it all and dominating the picture is the illimitable 'blue.' This is Africa untouched, unmarred. Often for an hour after sunrise one near-by peak is decorated with a rosy pink cloud-mass. At sunset its blue heights are draped in long flowing streamers of gold. As I write this, I know it is impossible to convey more than the vaguest idea of the infinite beauty constantly saturating my soul.

When one of the old time District Commissioners, a guest in our camp, asked me at two o'clock on a blistering hot day, my first day north of the Eusso Nyiro, "How do you like my country?" I had to reply: "I love the country I went through last evening from Meru to the River, but frankly I haven't begun to enjoy this part of it at all." I now know why his answer was only a queer look. My justification was that I had seen Africa only in the flat light of high noon.

I rise every morning at four-thirty, fortunate in seeing the passing of the night and in meeting the day more than half way. Nothing in the world is more divinely precious than that early morning hour. The night suddenly fades. A faint glow in the east, ever increasing in extent and intensity foretells the dawn. At last the indefinable radiance is crowned by the swift oncoming of a brilliant burning sun. It is then that the mountains take on amazing colors. The atmosphere becomes prismatic in hue,

while the veldt glows white as if covered with hoar frost. On all sides are masses of white campanulates, which unfold at twilight and bloom through the night, shriveling under the morning sun. At dawn the wind which has blown softly but steadily all night long increases. Its crisp freshness makes me grateful for flannel shirt and big silk neckerchief close under my throat.

We leave camp before dawn and spend glorious hours collecting on the veldt and in the hills. Between nine and ten the heat of approaching midday begins and increases steadily until about two; though rarely, even in this high temperature do the gentle breezes fail.

Sometimes we are able to be at lunch in our dining tent for the hottest hours of the day, between one and three. About three, the power of the sun is broken, a brisk wind begins to blow, and we go out again to our work. We do not return until after night-fall. Before we realize it, the indescribable glory of the sunset is upon us. The whole circle of the heavens is transformed by this most stupendous miracle of the day. Each sunset seems more beautiful than the last; and as the final act of the day's drama is done, I feel as if a curtain had been softly dropped by gracious hands upon the unfathomable mysteries of the world and all that lies beyond. I am absorbing something I have not had before and learning much of Africa's moods through the changing hours of day. African mornings are glorious past all description. African evenings are a revelation and a benediction. One must have a little of the artist's soul to appreciate Africa; for Africa is undeniably form, color, atmosphere. I believe that the greatest artist living could spend a lifetime painting these gorgeous scenes in Kenya's Northern Frontier and that at the end he would sigh, "I have only just begun." Every evening the sunsets on the veldt and mountains of our immediate environment give a totally different picture. Sometimes, they are filmy rose; again, all blue-gray; again, pure gold. As it never rains, one marvels at this diversity of color and at the great variation of the sunset cloud-masses.

But the mystic charm of Africa is not for the eye alone. There are equal delights and fascinations for the ear. At the first faint glimmer of the dawn the voices of the morning begin. A little bird sings softly in the acacia sheltering my tent, a timid, bewitching melody. Other lustier voices follow. The steel-blue dawn is upon us. Our camp cock crows. The hornbills begin their incessant calling to their little ones in their nests in the hollow trees. The morning is filled with singing, chirping, and twittering. Weaver birds are sweetly vocal as they flutter about their pendant nests hung in the high acacias as close as the birds can crowd them. Finches, kingfishers, starlings, doves, join in the sounding chorus of the first hours of day. These bird voices continue in varying volume throughout the day, as their food-gathering permits. I always wish the songs were longer and more sustained—they are so sweet and brief. Hawks, cranes, vultures, kites, spur fowl and guinea fowl add their harsh cries. They all flit from tree to tree among our tents, wholly unafraid and seemingly unaware of our presence.

Even at high noon many birds and insects are still vocal though in greatly lessened volume. Here there is no suggestion of the deathlike stillness of the tropic noon, often described by African writers. Heat waves shimmer over the landscape, the gorgeous coloring has been replaced by flat, white light, and I begin to long for the refreshing evening breeze. Then the evening falls. The whole world is alert again and through the night the crickets sing the songs they sing at home, the night birds cry fitfully; a little one like our ovenbird at home sings a wildly sweet, irrepressible song as if he could not sleep for the sheer joy of living. But most of the nocturnal bird sounds are rasping and metallic.

The other sounds of the night are varied and numerous. If I were only less tired physically or had in less degree this feeling of overpowering contentment, I would stay awake for one whole night. Then I could appreciate and describe them better. But I have persistently this wonderful sense of being at home after a

long journey. I am sleeping in what seems to me a luxurious tent on a comfortable canopied canvas cot, and yet I have a feeling unbelievably similar to that I have experienced when lying on my blankets on a bed of boughs under a big sheltering spruce tree in my beloved Canadian Rockies. The glorious big white moon streams over me in my wide open tent and I seem to be close to the blue dome through which it slowly moves. The soft medley of early night sounds lulls me to sleep, and it is only when a hyena later on laughs hideously fifty feet from my tent that I come abruptly back into the African night. Half a mile away, the stallions in a big herd of Grevy's zebra bellow, jackals bark, a frightened spur fowl in the tree above my tent squawks, and far away by the Eusso Nyiro a lion speaks, bringing the sounds of midnight to a startling climax. Sometimes at such an hour I go out of my tent and walk a dozen yards on the veldt and stand in the cool drenching moonlight. The wind sings softly in the waving acacias. The witchery of the night is upon me; the impulse to go further and further is almost irresistible though I know that I am violating one of the canons of safety in faring forth even this little way into the night without torch or candle. I return to my tent and sleep so quickly and soundly that when morning comes I wonder if I only imagined my midnight stroll. But my slippers are thick with thorns and I know I have not dreamed.

Throughout one dark night, Carl and I lay on the ground in the shelter of a thorn blind near a water pan to listen to the murmur and the clamor of the night. First came the tiny pattering footsteps of the Grant's gazelle as they struck the hard outer edge of the water pan, and a scurry of wings from the night birds disturbed in wading the shallow pool. Then the clattering of many zebra hoofs, putting to rout the Granties. The deep harsh call of the Grevy's zebra stallion was unmistakable. A half dozen oryx joined them and drank with them as amicably as they graze together in the same pasture lands. Each is well matched in size and strength and speed and striking ability, and consequently theirs is a complete understanding. But soon all these animals made





*Photo. by Carl Akeley.*

SAMBURU WOMEN FILL THEIR CALABASHES AT THE FAST RECEDING WATER PAN WHERE GIRAFFE AND ORYX DRINK. WEAVER BIRDS BUILD THEIR NESTS IN THE ACACIA OVERHEAD.



off over the veldt and the noise of their drinking was followed by a different sound. We crawled to our two little peep holes. Filling our clothing and scratching ourselves with thorns, we peered out into the darkness. A huge leaden shadow was trampling the water hole to a ruin. Pawing, snorting, gulping, guzzling—only one beast could be guilty of such actions. His footprints next morning confirmed our identification. We had seen the bulky form of a rhino. As he rampaged about, a hyena set up his dismal yodel and the jackals ran barking into the night.

At the water pans many tragedies of the desert occur. A jackal kills a baby gazelle; a pack of hyenas pulls down a large antelope, for we have seen them sharing a freshly killed animal with no sign of lion in the neighborhood. The lion himself takes Grant's and Grevy's zebra for his nocturnal meal. Morning brings the vultures to polish off the fragments and the dainty little sand grouse fly in to quench their thirst in peace.

Unfortunately, a fortnight after our arrival at our desert camp the water pans disappeared, and our thrill in fraternizing unseen with the midnight folk was all too short. Thereafter, the animals traveled to the big river to drink. Separated from our camp only by the sand river, trails of elephant and the wide footprints of the lion told me of their passing while I slept.

But the wild folk remained in great numbers on our veldt, and for many days I watched them and came to know some of them individually when we met. When, in our day's work far afield, we continually crossed the trails of many denizens of the desert, Africa became increasingly enchanting. By far the most interesting of all this unspoiled family of the wild is the reticulated giraffe, beautiful and graceful, frequently conspicuous, voiceless, mildly childlike in the expression of his eyes. What a marvel that he, so unaggressive, has been able to survive. Here at twilight we see a superb lone bull browsing on an acacia branch seventeen feet above the ground; on the warming veldt at sunrise we surprise, not a quarter of a mile from our camp, a herd of nineteen—mothers, 'totos,' maiden aunts and young

bulls. They hear, undisturbed, the sound of our cook's fry-pan breakfast gong. They merely amble off slowly at our approach; again we see at intervals along the way only mothers and babies of varying ages. Their size, their grace, their indescribable beauty of coloration, their unreality, thrill me as nothing else has ever done. They are in truth prehistoric animals which through age-long isolation of Africa from the destructive glaciation of the northern world have been preserved here. Surely they belong to an age long past, to a life long extinct elsewhere.

And how does this graceful, harmless creature defend himself in the environment of the carnivora? The giraffe has unusual sight and hearing. At the first suggestion of danger, when in the open, he moves in great strides to the nearest acacia tree, where to our eyes at least, he often becomes completely effaced, owing to his protective coloration, for his spots give the effect of mere splotches of light and shadow. But with the lion as an enemy the giraffe must also rely upon swiftness of foot; and if unable to outdistance his adversary, he turns, and when thus at bay he stands an excellent chance of striking the lion to death with his powerful hoofs. The female giraffes, more frequently than not accompanied by their young, are constantly on the alert, feeding only at short intervals and spending more than half their time in watching intently for enemies. It would be interesting to know just how they save their young from attack. Certain it is that the young are fleet and have endurance, which seems to be true of all young vegetable-eating animals. I have seen one calf, only slightly disturbed, run with its mother a distance of two miles at the rate of fifteen miles per hour. The lion, though swift at the outset, is quickly winded and often loses his quarry. Furthermore, in regions of abundant game the lion feeds on antelope, which are both more numerous than the giraffe and more easily obtained.

Here in grassy pockets, we come upon herds of oryx, the fabled unicorn of ancient times, whose spearlike horns show in vivid contrast to his gray body. Sometimes a lone bull stands sphinx-



like in the shade of a thorn tree; again, they mingle with the zebra herds in groups of twos and threes. Twice I have seen bands of sixty, bulls, cows and fawn colored totes, whose pretty gentle faces remind us of little Jersey calves.

The oryx has two methods of defense. His long spiked and powerful horns, often measuring thirty-six to forty inches in length, he uses in charging and striking; his speed in running is great. One can search the gray veldt with glasses and will frequently pass over an oryx standing in the shadow of a tree. Sometimes appearing like a spot of light, sometimes like the shadow, his gray, black and white markings aid largely in his protection.

Almost every time I look off into the sunlit slopes above a tree-lined nullah I see Grant's and Grevy's zebra. Like the oryx they vary in the numbers of animals herding together. Only occasionally a stallion grazes far away from his herd. Yesterday one decided to run a race with the heavy motor truck I am assigned to drive in this collecting expedition. He kept his handicap over me at twenty miles an hour for about a mile, and then suddenly crossed the ox-cart road in front of me. Sometimes a herd of ten or fifteen will line up in military formation as if inspecting us as we pass. Again a larger herd will stampede in a whirl of dust and almost invariably cross ahead of us. But by far the most desirable view of the Grant's or Grevy's zebra is when in herds of twenty or thirty some graze peacefully, others in groups of two or three stand absorbing the sunshine, and when the young of varying ages and sizes frisk about their mothers, like young colts in daisy filled meadows in May. In contrast with Grant's zebra, the Grevy's zebra is heavy, ungraceful and lumbering. The Grant's bark is a definite thing; the Grevy's bray is one of the indescribable sounds of Africa.

The zebra's stripes are another good example of protective coloring. When the sun is high, even though not far distant the Grevy's stripes are often invisible; and frequently he disappears entirely. Zebras run at fair speed, the Grant running in a straightforward way like a horse, the Grevy doubling up and galloping

laboriously and clumsily over the veldt, covering the ground at a fair speed, but seemingly a doubtful runner-up to the Grant.

Mingled with all these larger mammals are herds of Grant's gazelle and small groups of gerenuk with here and there tiny dikdik in pairs. Any day that we go out from camp we can see these herds and the gazelle have grown so accustomed to seeing us that they gaze at us for a few minutes and then continue their feeding. The gerenuk are more wary and will stand only a limited amount of inspection. Standing on his long slim hind legs with his lanky forelegs up in a thorn bush, a gerenuk is a strange sight indeed as he culls a few moist leaves from among the thorns. It is reputed that he never drinks. His habitat is in dry country from Somaliland to Lake Rudolph in the north, to Kilimanjaro and the Serengeti in the south.

The Grant's gazelle and the gerenuk rely for their safety upon their fleet feet and their protective coloring. Certainly no native could easily get within spear throw of these agile antelopes.

Frequently we happen on flocks of ostrich, half a dozen brilliant black and white velvety cocks with gorgeous white plumes tipping wings and tail, and with them their numerous family of drab-colored hens with broods of fluffy dust-colored chicks.

The ostrich cock, conspicuous at close range, fades into invisibility a hundred yards away. The females are blessed in the greatest degree with protective coloring, and at a few yards resemble clumps of dead or dying scrub. This may account for their greater numbers. In a flock of fifty birds I counted forty-two females, and in a flock of fourteen there were twelve. This is at least a wise balance in nature's provision for the perpetuation of the species.

I do not believe the hyena is ever in any danger; for surely no self-respecting animal, even though starving, would attack this loathsome creature. He is seemingly a part of the rough thorn scrub he infests. The jackal is a swift brown shadow, venturing into the open only at twilight or nightfall. The fennec foxes resemble flashes of grayish golden light as they chase from sun-

light to shadow, or efface themselves in the tall grass. Monkeys are a part of the gray tree trunks and the golden morning sunlight. They are here looking at me curiously on the bank of my sand river, and the next moment they vanish so swiftly that I think I have dreamed. Perhaps that is a tiny black face that shows in the shadow high up where a limb juts out from a massive tree trunk, or perhaps it is only the shadow after all.

And as I follow these animals of the veldt or scrub or open forest day by day not wanting to follow too closely, lest I disturb or frighten them, I see fear written in the movements, the demeanor, even in the faces of all these wild children of God's creation.

Every one, from the largest to the tiniest, from the strongest to the impossibly fragile, is possessed with but one all-absorbing motive—the reflex of self-protection. Constituted as we are, it is enough to grieve the heart of a human being to witness this furtive feeding, the wild spasmodic gaze over the landscape, the elevation of head, the quickening of breath, the quivering of ear and nostril, the swift dash to doubtful safety. The enemy is abroad *somewhere*; and this little beast of the field is all vibrant nerve and tense brain, that his life, brief at the best, be prolonged. To those of us who live in no sense of physical danger, no danger that impinges thus brutally upon our conscious selves, the scene is more than pathetic and yet it savors much of those dark hours of utter spiritual loneliness and fear which come to the soul of every man, when doubt or self-abasement or despair stands, a lurking enemy, insistent on the threshold. We can only believe, nevertheless, that the animals are not motivated by such fear as humans know but that they are happy as they must be to live and continue their kind. Their responses may be thought of as akin to the apparently fatalistic and thoughtless manner in which we cross city thoroughfares through a line of death-dealing motor cars.

Beyond our sand rivers and water holes are the rolling park-land plains, dotted here and there with acacias of smaller size

and with many low growing bushes, shrubs, and grasses. Further is the denser scrub. The low bushes grow thickly; the higher scrub, double their height, overtops them; and the acacias reach the height, if not the circumference, of those on the rivers. From a distance the entire top of the scrub is like a gigantic flat table overspread with a green velvet cloth. It is thus that the 'table top' acacia gets its name. Here walking is difficult or impossible. Tiny alleys of approach may admit one to the scrub, but on every side the branches reach out their thorns without vestige of leaf. Rope-like creepers trail to and fro, studded thick with thorns. Each bush bears thorns on twig and leaf. The acacias are a canopy of long white thorn spikes, protecting tender green leaves or soft yellow flowers from devastation. Only the giraffe dares feed upon these tender leaf morsels and I wonder at their dexterity of feeding. Spiked thorns, curved hooks, like fish hooks, plainly visible, concealed hooks, flowers with a calyx of thorns, seed pods thorn-protected until the time the wind may scatter them afar, are some of the marvels of defense. I think one of the loveliest flowers I have ever seen was in the safest place I can imagine. It was a fragile campanulate of faintest lavender, mounted on a framework of thorns set high on a thorny shrub. When I first saw it, a tiny lavender butterfly of identical shade was poised so immovably upon it that I thought it a part of the flower, and it was only after some moments that the butterfly slowly rose and disappeared in the air. How strange and yet how necessary that the insurpassably lovely is so inseparably linked to the most hostile of nature's plant creations. Here on my sand river charming hibiscus blooms profusely. Each day promptly at four it opens gay petals of yellow and deep magenta to the fast sinking sun. It is easily a challenge to any passer-by. And yet when I examined its leaves and stems, I found them filled with so many prickly thorns that either animal or man would think twice before despoiling. On the veldt the other evening I plucked a rather conspicuous rose-pink flower. Its stem was dif-



ficult to break and as I raised it to get its odor, I was pricked by a complete calyx of invisible protecting thorns.

Even the graceful waving palms that savor of rest and ease and festive decoration are strangely disillusioning on near approach. Each leaf segment has its sharp knife-point tip; each stem has its row of defensive thorns.

One day many ages ago this strangely beautiful veldt was doubtless vastly different. Other fair trees and flowers may have graced its broad reaches or its rocky kopjes; other animals of larger size, but of duller brain and slower foot may have fed upon that vegetation; but certain it is that only those stubbornly persistent plant forms have endured which by some trick of nature have created their own weapons of defense, and only the animals who have learned the art of self-protection have survived.

## CHAPTER VIII

### DRUMS AND DUSKY FEET

THE Wakamba are a pastoral people. Their droves of hump-backed cattle graze in the almost game-deserted reaches of the Athi Plains. Dotting the rolling uplands are their huts of grass and their manyattas—high, thorn-walled enclosures—in which their herds are driven for safety at nightfall.

They subsist on beef and milk, soured in smoky calabashes in the sun. Perchance an occasional antelope, falling before the hunter's swift arrow, augments his daily fare. Certain it is the roaming Wakamba archer is no uncommon sight, as he travels over the well-worn tracks connecting the small and widely separated clans. His hives of bees are hung high in large spreading mimosa trees along the water courses where amid the yellow blossoms, perfumed and profuse, they extract and store the honey so dear to every native's palate. His need for other wares must be urgent indeed to cause him to barter a pot of his treasured sweets.

And yet the Wakamba loves to barter. Traveling along the high road from Nairobi to Athi River and Machakos, you will meet in a morning a dozen caravans of these traders, marching toward the town. Seen from a distance they never fail to engage the eye. A dozen stalwart itinerants are in the group each adorned with what at a distance seems to be a gigantic headdress. On nearer view the decoration proves to be a well-filled woven chicken coop, with a gayly colored cock tied securely on the top. In the train are young boys carrying baskets of eggs swinging from their arms. Difficult indeed it is to overhaul them on the road or to interest them in the sale of their wares. Why should they not continue on their way, even though it involves portering their burdens thirty miles further, if thereby they can enjoy the thrill



*Photo. by Mary L. Jobe Akley.*

THE ROAMING WAKAMBA ARCHER IS NO UNCOMMON SIGHT IN THE HIGH  
KOPJES OF THE LUKENIA HILLS.



*Photo. by Carl Akeley.*

BILLY BILLY BROUGHT WITH HER A YOUNG HUNTER OF THE TRIBE.



of vending on the streets and the delights of crowded Indian hashhouse and bazaar?

Walking up and down the busy thoroughfares or seated on the gutter's edge in the Oriental quarter, these Wakamba hawkers offer their *kukus* (chickens) to all Nairobi's passers-by. Then, if it is your market day, your black boy chooses one to his liking; its legs are tied together, and it reposes unconventionally in his arms or on the floor of your motor car as you drive home. Those who are unable to sell all their poultry in the streets will come to your back door and after waiting until you are disengaged will offer their fowl and eggs for sale. Your cook, meanwhile, has selected the youngest, fattest hen, and has put the eggs through the water test, choosing those that will not float. Waiting is no hardship to any African native; days and months of his life are spent by choice in waiting. It is thus they maintain their social contacts and retail news and gossip to their heart's content.

Sometimes a Wakamba woman came into our camp carrying pots of ghi, butter made by stirring sour cream with stick or hand. She bartered with our cook and tent boys who in the early unsophisticated days of my safari management were sometimes able to extract sugar or tea from our stores. Such an arrangement was much more agreeable to our boys than parting with their own shillings. One or two little boys trotted along behind the mother, carrying a chicken or two and a basket of eggs which they offered to me for twice the price they sold them for in Nairobi.

Once, when first establishing our camp in the Lukenia Hills, I purchased a whole coop of Wakamba chickens. My cook let them run about the camp where they fed on insects and scraps from our table. Now and then he cooked one for our dinner. Soon the hens began to lay their eggs in the grass or under the rocks. One chose for her nest a chop box under Raddatz's bed. When we broke camp, one hen was hatching a nest of eggs. The cook transported her by motor and railway train—nest, eggs and brooding hen—in a little basket and reestablished her in our

Nairobi garage thirty miles away. Nearly all her eggs hatched. But eventually the hen and her chickens proved more of a liability than an asset to both my own and to my neighbors' gardens.

Perched on a shelving rock on top of the highest kopje of the Lukenia Hills, Carl and I had been watching a beautiful sunset. The darkening valley lay before us. Here and there on the rolling uplands we could see small black shadows gliding down the trail toward a torch of light—the flaming cook fire of their grass hut home. Now and then high-pitched tuneful voices came floating up to us as they called to each other or sang to the evening sky. Their dogs, too, were vocal in long, mournful cries as if beset by the hazards of the oncoming night. "Perhaps I am very silly," my husband said, after a long half hour of our silence, "but somehow this evening hour is very beautiful and very satisfying to me." At that instant, filling the semi-stillness, came a deep booming sound from a Wakamba manyatta a mile below us. It was followed as if by the softer overtones of a giant cello. From far across the hills arose an answering echo, continuous and distinct. Then again the first boom, this time clamorous and filling all the world; and again the reëchoing response. The drums of Africa! A message of distress, a summoning of their young herders home before an approaching storm, or a call to a neighboring clan, the drums are the quick and certain messengers of the Wakamba tribe. Throughout the night, the deep toned, softly musical reverberations floated up to me across the hills. It was my first hearkening to the melody of the drums in the great opera of the veldt.

Earlier than we anticipated we left the Northern Frontier. The giraffe hunt had lasted a long, arduous, and exhausting month. Although the collection was practically complete, both Carl and I had hoped to make a more intimate study pictorially and ethnologically of the Samburu natives who were our neighbors and frequent visitors in our camp at the Wells. They charmed

us with their simplicity and beauty of physique. They are herders, owning large flocks of sheep and goats and cattle. They dwell in makeshift huts built of sticks and grass and covered with skins, resembling somewhat the primitive hunting tepees of the Indians of Northwestern Canada. These tiny encampments sheltering possibly a dozen large families are located near a water hole. Here they remain during the rainy season when forage for their flocks is plentiful and water abundant. Then the problem of existence is easy indeed. They subsist upon the flesh and milk of their flocks with an occasional small addition of mealy-meal, secured from the Somali trader at Archers' Post, at the Crossing of the Northern Eusso Nyiro. But when the dry season parches the land the Samburu must deepen their water holes or travel far afield to fill their calabashes at some rapidly diminishing water pan. Eventually, when their supply of water has receded into only a mass of thickening clay, they must drive their flocks into new pastures, and transport their encampment near to the everlasting waters of the river. In all our African experience we did not see a more fascinating tribe.

The day after we pitched our camp, Billy Billy, the favorite wife of the Samburu chief, came in to make a friendly call. She was six feet tall. Her skin was smooth and delectable, gleaming like beautifully polished ebony. Although she assured me that she was old—she had had two babies—she had beauty of carriage, feature, and expression. She was scantily enrobed in soft skins, the color of old mahogany, hand-tanned by the process of rubbing with sheep tallow and the red earth of the veldt. Her hands and arms and throat were well shaped. Her numerous and massive hoop earrings of brilliantly colored beads strung on fine wire ornamented her well-modeled shaven head. She wore necklaces woven from the hair of giraffe tails, bracelets and armlets and anklets and leglets of burnished copper with all the grace and poise of a queen.

Billy Billy brought with her a young hunter of the tribe, telling me that he was very young—too young, she said, to be her

husband. He may have been twenty, and was a splendid looking fellow. He had the classic high-bred features of the Egyptian without any of the appraising hardness of expression so frequently encountered in the latter race. On the contrary the young Samburu was possessed of a highly intellectualized face, smiling eyes and mouth and perfectly shaped white teeth. Although his hair was encrusted with a thick paste of clay and sheep's fat, yet it failed to disguise a head both exquisitely proportioned and massive. His was a personality impossible to forget. So captivating were the Samburu that Carl decided that we should return to the Northern Frontier for a little holiday after the completion of our Congo expedition. He desired to make extensive photographic studies and also sculptural models of these interesting and prepossessing natives.

The visit of Billy Billy and her companion was in the nature of a reconnaissance. Late that same afternoon, they returned and with them came half a dozen other lesser wives of the chief each carrying a small child on her back and with a great flock of children at their heels. Billy Billy was obviously the leading spirit of the clan. She was always the spokesman and overshadowed the other wives with her initiative. They brought with them gifts of milk in gourd-like receptacles which were hand-carved from blocks of wood. The milk smelled strongly of smoke. So unpalatable did it prove that, after my guests had departed, I gave it to our boys who drank it with great relish. Later, for a money consideration, Billy Billy brought us daily milk which she had milked directly into clean bottles from our own kitchen. This, after boiling, we used to good advantage.

When the Samburu women first called upon me they seized the canvas chairs of our dining tent and, with every appearance of extreme comfort, arranged themselves in a circle, commenting meantime upon everything which they saw about the camp, and particularly upon my clothing. The gift of milk, their most valued possession, presupposed a return courtesy on my part, so I gave them bread and butter and hot tea with a reasonable



amount of sugar. For all the world like greedy, hungry children, they demanded more and more sugar and did not understand why it was not forthcoming. I think each would have consumed a pound had it been available but our stores did not admit of such hospitality.

One late afternoon, I had just finished my bath after a long day in the field. I was sitting at my little dressing table in my tent arranging my hair, when Billy Billy and two or three of the lesser wives appeared in my doorway. My hair, cropped to shoulder length, amused them greatly.

They rubbed their own smoothly shaven heads, and then pointed to mine. They came close and felt the texture of my hair. They watched me brush it, they emitted long gasps of amusement, and finally laughed vigorously at me. They apparently considered my thick hair a most useless possession. Billy Billy next came inside my tent to where my field suit of fine forestry cloth was hanging. She told me she wanted it. I said I needed it, in fact that I could not get along without it. Then she began to beg and pout a little. She laughingly said that she wanted it so much that she thought I should give it to her in any case. Her persistence and eager desire savored so completely of my own unsatisfied longings remembered from childhood, that I felt like a harsh parent. I am sure my refusal to gratify her craving pained me far more than it could have hurt her.

One evening, shortly before, Billy Billy had made her usual evening call upon me alone. She had been amusing herself by looking at everything in my little toilet case, when she suddenly seized upon a small looking glass. Although she had doubtless studied her own reflection in the water, this was apparently the first mirror she had ever seen. She took it outside my tent into the sunset glow, and there spent half an hour of pure delight admiring her face and body from every possible angle. She posed and smiled and talked to her image in complete abandon. Then she brought the trinket back to me shaking her head and clasping it to her heart with such a look of grief in her face at the thought

of giving it up that I presented her with it. From that time on she carried the mirror with her; and each evening, after she had deposited the bottle of milk, she would draw it from the folds of her leather costume, and with an irresistible smile, remind me of my generosity. The evening the band of wives had stopped to investigate my paraphernalia, she had again brought forth the looking glass and this time, with a look of determination in her face indicated that the other wives too were eager for a similar gift. Their ardent gestures were a strong backing for Billy Billy's request. I tried to tell them the little mirror fastened in the back of my dressing case was now the only one I possessed; but they were sure I was hoarding others and that I had been very partial to Billy Billy. With crestfallen looks, certainly with all past benefits of tea and bread and sugar forgotten, they departed grumbling. I was no less than the most selfish of all misers.

Almost every day, when we were at work in the field, we came upon a group of these childlike, winning creatures. In the cold dawn a dozen women squatted silently filling their calabashes at some fast-receding water pan. More often than not, a tiny, inconspicuous baby nestled warmly against his mother's shoulders, enveloped in the folds of her single goat skin garment while a little child of four or five clung to her skirt, hiding behind her at our approach, just like any little tot at home. Their water bottles filled, the women balanced them deftly on their heads and traveled swiftly and gracefully back to the little huts of their encampment.

Where we crossed the dry courses of their sand river, the young men trooped out to see our little photographic car. They played with the motor horn, shrieking and trembling with excitement at its honk. They admired themselves in the driving mirror and when we turned the electric light in our lamps on and off, they cringed and jumped about afraid that it would hurt them. And here when the day was nearly done and the veldt was ashimmer in opalescent light some glorious physical prototype of what every man might easily wish to be uplifted his musical

voice to the evening sky. Gathering together his flocks of black and white sheep and goats, he drove them gently homeward, his satiny skin and polished spear gleaming in the reddening sunset. May the day be long deferred when these Samburu natives are taught white men's ways and come to have white men's foolish needs!

But on a day when a giraffe was killed for our collection and brought into the camp for the final skeletonizing—the removal of the flesh from the bones—that indeed was a time of great rejoicing for these desert children. The foreground of our camp was tense in the effort of every white member to save the specimen for our collection, and it had in its complementary background of natives an atmosphere of almost equal intensity, but of different origin. The men with their brightly burnished spears planted firmly in the ground beside them, sat silently in a circle watching the completion of the process. Pound after pound of meat was removed and cast into a pile. Finally when our neapara had taken a supply for our own black boys, the signal was given for the Samburu to divide the remainder. Billy Billy then appeared in the rôle of Goddess of Justice. She towered over her troop of women, and after having secured the choicest tidbits for her lord and master, her children and herself, commanded an equal division of the spoils. There was no wrangling. No voices were uplifted until the job was finished. Then the women gathered up their provender and made merry with laughter and song in anticipation of the coming feast. Bending under their savory burdens, they filed out of camp into the gathering twilight, their tuneful voices reëchoing in the witching softness of the eventide.

Presently without any suggestion of haste the rearguard of braves knocked out their pipes, and after an exchange of friendly '*Quaheri*' (Good-night), took up the homeward march, a stately spear-decked cohort of the Northern veldt.

One day a camel caravan of Somali traders camped near the Wells. They were driving a large herd of sheep from Moyale near the Abyssinian border, three hundred and fifty miles to the

Nairobi market. We had grown tired of tinned beef and the fresh meat made available by our collecting. A roast of mutton I knew would find a welcome place on our table. Why not go over to the Somali camp and buy a sheep? I thought.

The Somalis are the shrewdest of all native traders. They brought me several well conditioned animals and when I had selected one they immediately told me it could not be purchased. Evidently I was in for the usual long parley which is a part of every sale. Then they went away and sat down on the ground and talked matters over between themselves. I knew that I had brought this on myself so I waited with all the patience I could muster. At last they drove up a sheep which looked as if it had traveled its last long mile. It was obviously unfit for food. This animal they told me they would sell for thirty shillings—a price higher than they could command for their best in the Nairobi market. Of course I refused to buy. As I walked away looking my disgust, I was aware of two or three of my Samburu friends in the distance, watching me with amused expressions on their faces. They knew the Somali's business methods. They approached me telling me in their gentle voices not to try to buy from such people as the Somalis—that they would bring me a good sheep to-morrow. Would they not bring it to-day? I asked. It was my day for catching up with my camp duties, while the men were caring for the skins and skeletons. To-morrow, we would all be back in the field. No, to-morrow they would bring a very nice sheep. "Very well, then," I said, "to-morrow, but not until after sunset."

The next evening as we returned from a long day's hunt I noticed half a dozen Samburus approaching, dragging a wildly excited sheep. By that time I was weary enough to wish I had never thought of mutton. I would buy the sheep as quickly as possible and clean up for dinner. But I had not reckoned with the Samburu mind. The men squatted on the ground while the sheep careened about us on his tether. What price did they want for the sheep? Only an exchange of glances. I looked hard at them





*Photo. by Mary L. Jobe Akeley.*

PRIMITIVE SAMBURU NATIVES THRILLED AT THE SIGHT OF THE SEARCHLIGHT  
ON MRS. AKELEY'S CAR.



*Photo. by Albert Butler.*

THE NATIVE KIKUYU MARKET AT KAGIO NEAR THE BUFFALO SWAMP.



but there was no response. I patiently repeated my request. This time I was informed that it was a much better sheep than the one the Somali had been willing to sell; in fact it was worth twice as much. On that point there was no argument. After waiting several minutes, I again asked the price. They discussed the matter among themselves but made no reply to me. As the situation seemed hopeless, I left them. It gradually dawned upon me that to them the sale of a sheep was the occasion of a long palaver and a longer visit. There was surely no need to hurry them. After an hour, I returned to them, this time with my cook whom I should have taken in the first place. They finally named a price, twice their usual one—then came down a few shillings, and I paid them glad to be rid of the tedious transaction. But they did not like the paper money I gave them; they wanted sixteen silver shillings which they could divide among the owners of the sheep. I gave the silver to them, and they counted it out, two shillings to each. Then they sauntered over to our porters' cooking fires there in chit-chat to complete the evening.

And yet after all, how different were they, in making an event of the transaction, to our own early settlers, at the rendezvous of market day, or in the sale of a much-prized horse or ox? My impatience was wholly unjustified. It was one of their social recreations. Each member of their flocks, guarded carefully in infancy and protected daily and nightly at maturity from the leopard's claws, had a distinct personal significance and value to the Samburu. His ceremonial of sale was one in which I should have granted him full indulgence.

It was midnight on the Northern Frontier. I had been asleep perhaps two hours, when I was suddenly awakened. I was aware of faint but insistent sounds. The echo of a Maypole chorus, the undertone of distant tropic thunder seemed commingled in a harmony of minor chords. Was all this only a dream? Or had those little fever devils, which sometimes come after long hours in the sun, again taken possession of my brain? Here was my green tent; here the recurrent pipe of the friendly little night

bird who always roosted in the tree above my wilderness home. Then came the voice of a hungry lion speaking far out on the veldt, and the nearer clattering hoofs of stampeding zebra. But from down the sand river drifted the inflow of many voices accompanied by the synchronic throbbing of the drums. Billows of sound, swelling in wildness, then subsiding to a moaning cadence with only a muffled echo of the drums! Increasing again, the chant became a wanton crescendo with the drums tumultuous, major, transcendent. The air and earth were trembling with the beating hearts and dancing feet of the Samburu. I knew it was more than the magic of the night that stirred them. It must be that the greatest of all things in their lives had come to pass—greater than birth or death—the nuptial ceremonial. It is the event for which during a period of many years each participant is prepared. Throughout three long moon-drenched nights this marriage ritual continued. It was only silenced by the advent of the sun. And each night as I lay and listened, reluctant to forego the thrill of a single drumbeat, it was for me a gift of primitive Africa infinitely more precious than sleep.

We were crossing above the outlet of Victoria Nyanza. Our caravan of motor lorries filled the small ferry boat from Jinja. Our few East African boys crowded in the stern or lay on top of the heavy loads. Carl and I sat in the bow, devoutly thankful that we had gotten out of Jinja, for a smallpox epidemic was raging there. It is so easy in Africa to be caught in the appalling grip of so-called civilization, and in almost the next moment to slip free from it all. Hot, dusty and anxious though we had been all day long, the lake wind now calmed and refreshed us. The sun was at last touching and reddening piles of gray cumulus clouds floating above the dark blue borders of the lake.

The violence of that day's sun had passed. The afterglow remained, the promise of a cool and restful camp at twilight. Suddenly a fleet of graceful canoes, high in prow and stern, shot from darkening shadows into the sun-glade. Each was manned



by six stalwart natives bending lithesomely to the dip of their paddles, singing with every stroke. And in the stern of each canoe, for all the world like a coxswain of a college crew, sat a slender youth who supported the chant with the rolling accompaniment of his drum. They all sang in unison, sang with voices and with every muscle in their graceful bodies, as they drove their long paddles deep into the water and reached the wake of our boat; then, their little craft careening up and down with the swell, and singing and laughing at each other in turn, they conveyed us to the shore. Their frolic finished for this trip at least, they slipped into the grassy shallows of the bank below us and as our boat tied up to the landing spiles, vanished from our sight. The Nyanza natives had had their hour of merrymaking served by their frail craft and by their drums.

Bufundi is a green promontory jutting out into the sapphire waters of Lake Bunyoni. It is one of the loveliest places in all the world. Here and there, clusters of euphorbia trees stand out black and sharp against the background of the brilliant lake. Dark green mountains rise in a misty barricade around the lower hills and guard the islet-dotted waters of this inland sea. Everywhere the land is flecked with fruitful shambas, lush banana groves and virgin forests. Everywhere the lake is bright with lotus—purple blossoms with their heart of gold—bright also with flocks of iridescent ducks who seek their food in reedy marshes near the shore. Fishermen drift slowly here and there in native dug-outs. They bask and sleep in the wind-tempered sunshine or, when impelled to slight effort, replenish the family larder. Now and then fleets of transport canoes carry the white man and his safari to and fro. It is a place of beauty and of dreams—a spot to dwell in and to love.

In the late afternoon our two hundred porters, traveling the short road from Kabale, had dropped their loads at the water's edge. They had received their ten cents in the currency of British East' and had departed, satisfied with the earnings of the day.

Fifty waiting dugout canoes, each manned by four stalwart oarsmen, rose and fell in the restless shallows. Quickly freighted with passengers and dunnage, they made swift passage across the six mile ferry—the first stage in the hundred mile journey to the volcanoes of the Congo. The brief afternoon had vanished with our refreshment from the joy of the beauteous hour and scene. All too soon the night had dropped upon us.

We had risen well before the sun. A long march in tropic heat, across steep hills and through swampy valleys, lay before us like a lurking foe. Now stalwart natives came drifting slowly down the trails. We needed full two hundred of them! Delay is fatal in the sun. Surely their chief had been well warned—kindly Captain Tufnell had not left him unprepared. In twos and threes we watched the porters coming in. Then came the imperative command of native Africa! The chief was speaking to his men. From his little thatch-roofed village on the hill, his drums boomed out in language certain, loud and clear. To upland village and to hidden huts along the sedgy lake, the drum beats rolled. A quick and steady stream of blacks replied. As in a storm, the drums now thundered out, resounding over every hill and bay. Whatever other tasks a native might have planned that day, must wait upon the mandate of His Majesty's service and on the order of the Bufundi chief.

How adequate, how swift, this message of the drums! Here no fleet runner of the hills is needed for dispatch as with copper-colored men who live in tepees in our western lands. The drums transmit the message and the dusky feet respond.

Long before our camp was broken, the dark cohort rested silently in its line, leaning on staves or spears or crouching patiently on the ground, ready to jump at the first signal to begin the march. And what a tribe they were! Six feet, deep lunged, arrow backed, modeled with the perfection of Apollo, nobly savage in mien! They tussled like children for the smallest loads—we would not have had them supermen—and laughed and shouted loudly when they seized a money chest and found its weight out of all





THE MOTOR CARAVAN OF THE AKELEY-EASTMAN-POMEROY AFRICAN HALL EXPEDITION.  
THE DAYS OF THE OLD PORTER SAFARI HAVE PASSED IN ALL BUT THE MOST REMOTE PLACES,  
DESTROYING THE ROMANCE OF THE DAYS OF PRIMITIVE TRAVEL AND MAKING POSSIBLE





AFRICA; MOTOR TRANSPORT HAS SUPPLANTED THE NATIVE CARRIER,  
INSIVE EXPEDITION IN A COMPARATIVELY SHORT TIME.



proportion to its size. Swinging their burdens to their heads they glided swiftly across the mountains. Each stalwart porter bore his fifty pounds with all the grace and unconcern of a heavy antlered moose in the full prime of life.

Thunder heads were piling over Kenya. The raw glare of the sun was beginning to soften in the haze. Two hard, warning downpours had startled the land from its four months of sleep. Patches of living color dotted the dead face of plain and upland. The wild fig trees were in full leaf, the acacia buds were unfolding, the coffee was in flower. In the blue dawn, the snow-splotched pinnacle of Mt. Kenya cut the northern sky, but with the upward march of the sun, it was obliterated by clouds and was not seen again throughout the day. Clouds likewise enveloped the Aberdares, and extended even to the ice dome of Kilimanjaro in the southern vault.

We had tramped fifty weary miles over volcanic slag from our torrid camp at Lake Hannington to the end of the motor track, and had driven our lorries up out of the Great Rift in a cloud of dust. Surely, the February rains were ordained; they were the urgent need in the mind of every white settler, the subject of native supplication.

Everywhere along our way into Nairobi, Kikuyu shambas gold and purple in the cloud-shattered afternoon sunlight, enriched the rolling uplands, outspread like crazy patchwork among the tall planted wattle or low native shrubbery. Fields dug deep and clean—for the planting of corn, potatoes, beans and squash—only waited the first salutary baptism of the rains.

Here and there from far away thicket—but where we knew a little cluster of grass huts must be—and floating towards us like thistledown in a breeze, came, intermittently, sounds too elusive to define. It might easily have been but the beating of an artery in my feverish brain. I only knew those dusky children of grace, inspired by feelings and impulses beyond our powers of mind to comprehend, were outpouring their untarnished souls to a slowly

awakening world. Savage! *Silvaticus*! Belonging to a wood! Yes! Thank God! Here a stone's throw from white men's plantations were a people essentially wild, untamed, a people born of a forest long since destroyed. Now and then Kikuyu women rested their ponderous loads of potatoes or of wood, pausing in their journey to watch our motor caravan pass along a red-brown track for generations worn smooth and hard by myriads of bare black feet. To-day, some new spirit foreign to their daily rote possessed them. With hands clasped together they swayed to and fro. Singing and laughing they lifted their burdens and continued on their way. The music of the spheres was thrilling in their bodies and their hearts.

A fortnight later, after a week of afternoon cloudbursts, I was again in the Kikuyu hills with Bill and my little toto, Bob. I had packed my lorry with a small camp kit and had driven out into the blue, seeking the sleep which had deserted me in the cataclysm of my desolate, heartbreaking return to our Nairobi home at the finish of our expedition. Our evening meal had been cooked over a tiny fire with a quick shower beating down upon the sheltering fly, but I had eaten my supper with the sunshine blazing over the wet green world. The quick transitions of Africa! Thunder storms, a sudden burst of evening glory, rainbow skies, the sweet smells of dank earth, of lush grass, of pungent herb. Destruction, chaos, refreshment, solace, peace! Perhaps sometime my weary heart might thrill again to the beauty of the world!

Suddenly in a little open glade before my camp appeared a troop of Kikuyu maidens—velvet-skinned, soft-eyed, slender. Moving in a rippling circle, they stretched their arms to the clearing heavens, their smiling faces uplifted in the glowing light. They wore flower garlands on their shaven heads—they waved green plume-like branches aloft. Their ornaments of native jewelry—copper wire and wire strung beads—adorning neck, ear, wrist, arm, leg and ankle, tinkled like tiny cymbals in their swinging dance. They sang to the spirit of rain—to the magic



impregnating their fields with sprouting grain. Then, a little way down the valley a faint sound of other voices, dominated by the booming of the drums, was repeated here and there and everywhere, it seemed, until we became only a little point in the center of a sphere of throbbing sound. Responding to the call of the tom-toms, the maidens danced away from me as suddenly and as softly as they had come.

And as I lay on my cot that night, watching the awe-inspiring firmament march by, I had much gratitude in my heart for the gift of the smiling Kikuyu maidens, their praise of God 'from whom all blessings flow.'

## CHAPTER IX

### HUNTING THE AFRICAN BUFFALO

WE had been hunting on the Northern Frontier exactly a month. With all hands at work on the preparation of specimens, the collection for the Water Hole Group was rapidly nearing completion. Early in the afternoon I had given my cook dinner orders for our family of six and at sunset we were about to stop work, bathe, and rest a little before our evening meal. From a big cloud of white dust I heard an unmistakable hum of engines and soon to our surprise and pleasure a fleet of motor cars and lorries pulled up under the big acacia trees of our camp. Mr. Eastman, Mr. Pomeroy, Dr. Stewart and their white hunters, Percival and Ayer, had come in unexpectedly with Mr. and Mrs. Martin Johnson from their hunt around Marsabit and Lisamis. It was great fun to see them again and to hear them tell of their experiences since they had left us at Nairobi.

At our table that night was a merry party of thirteen. Unlike many others of his calling my cook was always thrilled to provide for the unexpected guest. His skill and my speed in unearthing certain chop box mysteries resulted in a dinner that my guests were kind enough to compliment. A nut and raisin cake that I had fortunately baked the day before gave our repast the festive touch that such an occasion demanded. No one noticed that there were not enough glasses and chairs to go around and that some were seated on up-ended chop boxes. The newcomers pitched their tents beside ours and all night long our camp buzzed and hummed with the droning voices of many natives as the black boys of their safari held *shauri* (conclave) with ours.

As we were sitting around the campfire after dinner, Mr. Eastman and Carl arranged for the collecting of the Buffalo



*Photo. by Mary L. Jobe Akeley.*

THE MOTOR LORRIES HAD TO BE UNPACKED AND PUSHED THROUGH THE CROCODILE-INFESTED WATERS OF THE NORTHERN EUSSO NYIRO.



*Photo. by Mary L. Jobe Akeley.*

CARL AKELEY WADED FOR HOURS IN MID-STREAM TO SUPERVISE THE HAULING OUT OF THE MOTORS BY MEANS OF ROPES AND PULLEYS.



*Photo. courtesy of Field Museum of Natural History.*

CARL AKELEY'S BUFFALO GROUP IN FIELD MUSEUM OF NATURAL HISTORY, CHICAGO. THE ANIMALS ARE SHOWN ON THE ALERT. THE BUFFALO IS ONE OF THE MOST AGGRESSIVE, SUSPICIOUS AND DANGEROUS OF AFRICAN ANIMALS.



Group. It was decided that the hunt should begin at Embu, on the southeast slope of Mt. Kenya, and, if unsuccessful there, we would all move on farther south to the *tinga-tinga* (swamp) near Kagio which for many years had harbored a considerable herd of these wary and formidable animals. The next morning after photographing all the members and motors of the two safaris, our visitors started south—Mr. Eastman and Mr. Pomeroy to begin the buffalo hunt at Embu, and Mr. and Mrs. Johnson to go on a fishing trip near Nanyuki. Carl and I were to join Mr. Eastman and Mr. Pomeroy for the buffalo hunt as soon as possible. As there were still one or two specimens to be collected for the Water Hole Group, Carl arranged that Rockwell should stay on to secure the needed animals. Jansson remained with him. On the Fourth of July, we struck camp at the Wells with considerable regret; our experiences here on the Northern Frontier had been so filled with wildness, remoteness and adventure.

Our motor lorries and my little light car were heavily laden because we were taking with us not only our camp equipment but a great part of the collection as well. Rockwell and Jansson accompanied us as far as Archer's Post, where, before we could ford the Northern Eusso Nyiro, the contents of our lorries had to be unpacked and portered across the crocodile-infested stream. There was considerable contention among the boys for the privilege of carrying the most prized object of our collection—the skin of the big bull giraffe—which thinned and dry though it was, still weighed about one hundred and twenty-five pounds. The honor fell to the lot of Kambi, the powerful Wanyamwezi.

When the last load had been safely deposited on the opposite shore, the empty lorries had to be pulled and pushed and hauled across the river. In the absence of a mule team or helping lorry on the opposite side, we accomplished the ford by fastening one end of a heavy cable to the lorry, passing it around a sawed-off tree on the far bank and tugging and pushing with all our man power. Once our first lorry was across, its engine power was put to use in helping the others over. One after another the motors were

thus laboriously drawn up on the southern bank, ready to be re-loaded. As we traveled along the track south of the river an occasional herd of giraffe and several bands of oryx stood watching us as if to say a relieved 'good-by.' We made ten miles more before nightfall forced us into camp.

Hungry and tired as we were, supper that evening was most unappetizing. I had left my cook with Rockwell, and our tent boy and kitchen totò proved far from expert as chefs. Furthermore, the wind blowing steadily over the dry plains seasoned our food liberally with sand. Carl was so ill and fatigued that he could not eat a bite. As always allotting to himself the heaviest task, he had grappled with all the difficulties of the ford, standing hip deep in the water for more than an hour that day, directing the black boys and constantly working with them to haul the lorries across the river. All night he tossed and moaned with high fever. We had placed our mattresses and blankets on the floor-cloth of our little tent and opened it at both ends to the cooling breezes of the night. The next morning we were both almost unrecognizable, so dust covered were we. It had been a memorable Fourth of July and the first really uncomfortable and wholly anxious night that I had spent in Africa.

Although the motor train expedites field work by hastening travel and permitting the transportation of complete taxidermic equipment, it is not without its disadvantages. Even along the so-called 'motor roads' tires are short-lived and filling stations are unknown. Between the widely separated dukas the African motorist transports his own petrol supply in big tins or 'debbies.' Frequently is he forced to refill the petrol tank when half way up a steep grade or in some other equally inconvenient spot, so unrelated in this high altitude is the distance covered on these hills and rough roads to the fuel consumed.

At Meru we found waiting for us a stock of tires sent us, as prearranged, from Nairobi. Nevertheless, our hunt over the rough, thorn-grown veldt had so nearly ruined our tires that on this trip both before and after this replenishment of our supply,

Carl changed and mended tires on his car and mine as often as six times a day.

Nothing in the world appeals so strongly to a native as riding in a motor car and posing as a motor car boy; but at this stage of our safari all our boys were willing to stand back and watch *Bwana* (master) do the hard work, although by the close of our expedition two or three of them began to take the initiative in changing tires and had learned to patch inner tubes.

Climbing the hill into Meru we traveled for a mile or so along the fresh spoor of elephant, showing plainly where they had emerged from the forest and entered again. Beyond Meru a beautiful graded road wound through the cool shade of the Kenya forest. Here where the winds constantly blow from the steadfast snows of Mt. Kenya, hundreds of Meru maidens were at work reconstructing the highway, after the devastating rains that had almost obliterated it in many places. They were clad in slight garments of dark-colored skins and wore many strings of blue and white beads. The clash, clash, of their copper bracelets against the large metal basins in which they carried soft brown earth, enlivened their monotonous work. As our motor caravan, rounding a curve, suddenly came upon them, they scurried across the highway huddling in a quivering, dancing, shrieking mass against the cut bank of the road. Their gorgeous bronze coloring, their smiling, childish faces, and affrighted attitudes remain for me an ineffaceable living scene in the green-forested foothills of Kenya. They contrasted vividly with their brothers at Meru, who, with paste-plastered faces, ostrich feather headdresses and gayly painted shields and spears—capped in peace with pompons of black ostrich—held carnival at the Government Post. Here on the one hand was witching simplicity and labor; on the other adorned mummery and frolic—two opposite phases in the lives of these children of the highlands.

The second morning we reached Embu where we stopped to see the District Commissioner and his wife, Mr. and Mrs. Lamb, two of Africa's pioneers. They made us very welcome, forgave

our travel-stained appearance and told us that Mr. Eastman was camping near-by. After an hour with Mr. Eastman we drove on to our old camp at Kagio, finding the roads on this side of Kenya infinitely better than they had been on the north side a month before, but everywhere deep in red dust.

With Kagio as our base we made several reconnaissance trips around the buffalo swamp ten miles away. In three days, the Eastman party, whose hunt at Embu had been unsuccessful, overtook us and we all made camp on the edge of the swamp. We were within sight of the Theba in the triangle between the Theba and the Tana rivers.

I think this camp had fewer redeeming features than any other we had in Africa. The moment the sun had set on the evening of our arrival, hordes of mosquitoes from the swamp attacked us. We pulled down our shirt sleeves, put on our heavy coats, turned up our collars and tied handkerchiefs over our heads. Then we kept up a constant fight with handkerchief or leafy brush to keep them from lighting on us. Humming and buzzing, they besieged us continually. Even during the day it was necessary to be on our guard, but when evening came their onslaught was formidable. We went to bed without lighting our lanterns, but even then they invaded our mosquito canopies. Each night before going to sleep I had a torchlight hunt for mosquitoes. Careful though I was, it was impossible for me to get under my canopy without admitting three or four of the pests. In spite of our precautions we were all badly bitten and each one of us who remained there during any length of time had fever in consequence. Even our native boys demanded mosquito canopies. Their request was so just that we sent a messenger one hundred and twenty miles in and out of Nairobi in order to provide protection for them.

In strange contrast with the conditions we found here, my husband had not been required to use mosquito canopies at all in his Tana River camp in 1910. Never before in Africa had he been so troubled by mosquitoes. For six months at a time his nets had remained in the duffle bags. It is worthy of note that this terrific



influx of mosquitoes is coincident with the passing of the game, though whether or not it may be related to that fact I cannot say.

In our camp there was not a stick of wood. In fact there was no tree at all near-by. We therefore had to buy wood either in the market at Kagio or from native women who came to us with bundles of wood for sale. Finally we discovered near the banks of the Theba an abandoned shamba with an enclosure made of sticks, which had been left there to rot. It proved a blessing to us as the matter of getting enough firewood, for cooking was extremely difficult.

One of the compensations for the disadvantages of this camp was the abundance of the Kavirondo, or crested cranes—the most beautiful bird I saw in Africa. It was their mating season. They assembled in hundreds near a little pool back of our camp where they fluttered and danced and called incessantly in a wild minor strain. In the early morning we saw them there floating in the air two or three feet above the ground with their beautiful white wings outspread and heard their weird, haunting love call. At sunset they flew low in pairs over our tents and across the swamp still calling to each other “Au-wau! Au-wau!” They came so close to us that we saw plainly their beautiful gray and white bodies, the fine brown aigrette-like feathers of their wings, their black velvety heads, crested with gold, and their snowy cheeks spotted with vivid red. The Kavirondo crane is frequently tamed by the natives. A little Kikuyu boy brought me one, half-grown. It was an orphan, he said, stranded in the swamp. Knowing he might easily fare worse if I refused to take him, I bought him from the boy. I put him in a petrol box where he quickly made himself at home and soon he was eating out of my hand and sleeping in my tent. I covered him up at night just like the family canary. The Kavirondo crane loves to be petted and is easily domesticated—otherwise, I could never have kept this young one in captivity.

All about our camp were large bebies of quail of a variety not more than half as large as our American ‘Bob White.’ Wherever we went on foot or in the car we flushed a covey that would sud-

denly whirl away only to settle down a few yards beyond. Broods of ten and fourteen frequently wandered into camp and there scratched and peeped all day long. There were mothers with half grown chicks and there were mothers with very small chicks. One mother with a flock of twelve that looked as if they had just emerged from their shells came daily under my tent fly. One day as I was writing my journal they came inside and walked deliberately the entire length of my tent. So fearless were these little creatures that before we knew it our natives chased and killed a dozen of them with sticks. We might have had quail constantly for food but we chose to have them stay in our camp unafraid and unharmed. We served the delicacy on our table only once, although without exaggeration the birds were there in thousands.

The arrival of mail is a welcome event wherever one is camped in Africa. One day we went to Fort Hall to meet Bill who had gone into Nairobi by motor bus to post our letters and to fetch some artists' supplies from our base. Returning he brought me, not only a packet of mail from home, but also a big basket of fresh fruit and vegetables from the Nairobi market. There were papayas, oranges, pineapples, peas, beets, potatoes, turnips, radishes and lettuce. I was of course greatly pleased at his thoughtfulness. However, Bill had yet another surprise in store. "I have a *kondoo* (sheep) for Memsahib," he said, dashing behind the duka. Presently he and his brother—a very old man—and his brother-in-law—a fine looking young man—appeared with a big, brown, fat-tailed Kikuyu sheep. By pushing and pulling they finally hoisted him into the back of our motor car where he rode between Bill and our boy, Kambi, back to the camp. I am sure that Bill had even more joy in giving me this present than I had in receiving it—great as that was. His brother and brother-in-law had driven the sheep ten miles from Bill's shamba up in the Kikuyu hills. The sheep became a camp pet, and when we left the Theba he rode triumphantly on the top of the motor load eighty miles into Nairobi, where for nearly three months he remained in the care of our askari, one of Bill's cousins. To be

sure he trimmed up my flower beds and ate many of the vegetables in the garden, and it was reported on one or two occasions that he became rather violent in his dislikes, disturbing well-dressed ladies who visited our garden, but we postponed killing him until we were ready to start for the Congo.

The weather in the buffalo camp was in strange contrast to the clear cloudless weather of the Northern Frontier. Rain, mist, haze and murky atmosphere were some of the trials of our daily life. In seven days we saw the sun not at all and Mt. Kenya—the dominant feature for the background of the Buffalo Group—was continually shrouded in clouds. Such conditions made it extremely difficult for Leigh to paint the landscape. While he waited for Kenya's pinnacle to clear, he was able to produce a study of the foreground—the tall reeds of the swamp and the clear dark stream which emerged from it and washed the outcrop of volcanic rock where our tents were pitched. All along this sprightly water course was a border of exquisite lavender-tinted lotus, and among the high grasses blossomed hibiscus, blue, yellow, white and dark mahogany. Profusely mingling with the green growth of the swamp and coloring it as if a vast cloth of gold were spread thereon were myriads of deep yellow blossoms, vivid as the goldenrod or gorse.

One evening, after more than two weeks of waiting, we heard the distant rumble of thunder. A light rain fell and the atmosphere cleared perceptibly. As a great white moon slipped from behind the scurrying clouds, the entire swamp became resonant with the familiar voices of peeper frogs. The next morning a welcome sun lighted the scene and the artists were at last able to paint the flower-filled swamp, the dark tree-shaded course of the Theba River in the middle distance and beyond it all, overshadowing and impressive, ice-pinnacled Mt. Kenya with the smokes of her thousand Kikuyu shamba fires rising from green foothills and finally vanishing into the clear blue sky.

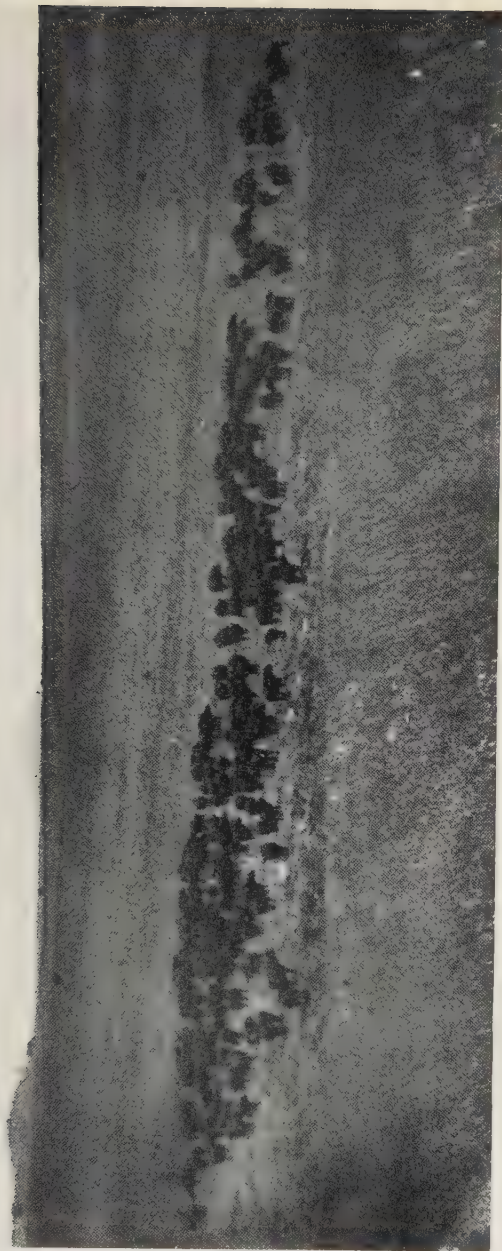
Immediately upon our arrival at the swamp the buffalo hunt began. The first day out Mr. Eastman secured a fine young

buffalo. Here a few years ago dwelt one of the largest buffalo herds in all of Kenya. To-day a small herd of fifty or sixty—the few survivors of the large herd—inhabit this swamp. The tall reeds and grasses completely conceal the animals, but one usually can mark their whereabouts in the daytime by the flocks of buff-backed egrets or 'cattle herons' which frequently hover over them, their white wings glistening as they whirl and turn in the sunlight, before they descend upon the herd to poise on their backs and feed upon the ticks. Sometimes in the late afternoon but more frequently at nightfall the herd leaves the swamp to feed upon the long, lush grass of the ancient volcanic plain. Fortunate indeed is the hunter to get within shooting range of a band, whether in the evening or in the early morning, before they again return to their marshy stronghold. The buffalo is one of the most aggressive, suspicious and cunning of African animals. Once the herd is shot into, the angry beasts retreat to the dense swamp where they lie in wait for any intruder. It is hazardous indeed to attempt to hunt them there.

The green walls of the tinga-tinga are broken here and there by tunnel-like trails; its floor is black gumbo, dotted with islands of reedy grass. With such insecure footing, a man cannot hope to invade the morass silently and in such a labyrinth he cannot tell where the cunning inhabitants of the swamp may lurk. My husband, on his previous visit to this buffalo swamp, had secured permission to hunt there only with great difficulty. The privilege had been denied him at first because of the great danger involved.

After Mr. Eastman's successful shot, the wild dwellers of the marsh, with their wide spreading horns and shining dark coats, hid themselves in their boggy fortress and refused to show themselves. Skirting the swamp as stealthily as our motors would permit we hunted and watched in vain for them. One late afternoon my husband and I left our car on the high ground and waded into one of the tunnels in the tall reeds in the hope of seeing a buffalo. Soon we detected that unmistakable barnyard scent which always surrounds the herd. Thirty yards ahead the reeds





*Photo by Carl Akeley.*

A HERD OF BUFFALO GRAZING PEACEFULLY IN THE OPEN BETWEEN THE THEBA AND THE TANA RIVERS AS CARL AKELEY FIRST FOUND THEM IN 1905.



swayed a little; otherwise all was still—too still. Invisible angry eyes might easily have watched our movements. It was tense enough for me, inexperienced though I was.

"Go back! We can't go further," my husband whispered over his shoulder backing out cautiously and covering our retreat. He knew the peril such stalking involved. When a herd, thus disturbed by shooting, wary and vengeful, stampedes in your direction the best shot in the world has scarcely a chance.

The vanished herd showed no intention of coming out of the swamp again. Mr. Eastman and his party traveled on down the Theba in the hope of encountering another band. The going was so very difficult that the springs of Mr. Eastman's big Buick motor car were soon broken and he was forced to abandon the hunt. Since the automobile had to be taken into Nairobi for repairs, he decided to undertake another safari elsewhere. Carl was keenly disappointed that his time with Mr. Eastman on his African trip was thus curtailed.

The trackless plain between the Theba and Tana rivers is so rough and broken that it is almost impossible for motor transport. It is covered with tall grass higher than the radiator and so dense that thousands of formidable volcanic boulders strewn in profusion over the plain are completely obscured. The most careful driver is bound to encounter difficulty. Moreover, the whole country had been under water in the rainy season; and now that the dry season was on, hummocks of clay, concealed by the grass, stood up like so many rocks. In fact, to drive a motor car over such country was as nerve racking as it was dangerous. After a deep track is once made through the tall grass and can be followed day after day, driving is easy enough, but it is extremely difficult when one must steer blindly through a pathless sea of grass. Our experience, I often felt, must be comparable to that of the motor transport boys in France when war exigencies prevented the use of headlights at night.

After we had hunted for more than a week in the tinga-tinga, Raddatz returned to the Northern Frontier to help Rockwell

move his camp down to us. Carl and Rockwell continued the buffalo hunt. On one occasion they made a two day trip to the junction of the Theba and Tana rivers through a region Carl had previously know as swarming with game. They encountered only one small band of buffalo and saw almost no other animals. They returned without either seeing or securing a single suitable specimen. Their long journey, jouncing in an empty lorry, over the sun-baked plain was another heartbreaking, fruitless effort made necessary only because of the rapid and ruthless slaughter of the game.

Not only has this great valley witnessed the diminishing of its buffalo herd but it has also witnessed the disappearance of practically all the other animals once so common and plentiful, such as hippo, kongoni, the gazelles, reedbuck and rhino. At intervals of ten to thirty yards all up and down the shores of the Tana are deep furrows in its clay banks, cut out in bygone years by the sharp hoofs of many hippo. To-day the hippo are scarce indeed. In 1910 in a ten mile march Carl counted more than two hundred hippo, but during more than a month in this region only seven hippo were seen by members of our expedition. In a journey of ten or fifteen miles from our camp and back again we could see only two or three kongoni, a dozen zebra or a solitary reedbuck. As we swept the plains with our binoculars longing for at least a glimpse of something wild, we constantly met disappointment. Usually the plains were as deserted as if swept by famine, or the dark herds grazing in the distance proved only native cattle wandering far from some thorn-enclosed manyatta. In the whole triangle we saw only one rhino.

The desolation wrought in this region greatly depressed my husband and made him appreciate more than ever before the absolute necessity of carrying out his plans for African Hall at once. Even in 1905, when he found on the open plains near the Tana a herd of five hundred buffalo, indifferent both to the sight and sound of man because they had had little experience with him, it had been a tremendous task for him to obtain the speci-



mens desired by Field Museum. To have shot a half dozen buffalo then would have been easy but the selection of a scientific series to illustrate the animal's development from immaturity to maturity was quite a different matter. Under such changed conditions as we encountered, to make a collection suitable for his purpose was almost impossible.

Hoping that the nerves of the tinga-tinga herd had by this time steadied down a little and that they would soon venture out to graze at sunset or at dawn, Carl suggested that Rockwell build a *boma* high in a tree at the upper edge of the swamp. Here he and his gunboy, Molimo, spent several nights on the lookout for a proper specimen. At first nothing happened. Then one morning the movement of the cattle herons above the swamp indicated the approach of the buffalo. About nine o'clock, unaware of their observers, they moved in the direction of the tree with the sun shining brightly upon them. When thirty yards away, fifteen that had detached themselves from the rest herded together on a dry knoll that rose like a little island out of the swamp and there clustered about a great bull. One by one cows and yearlings lay down at his feet and began to chew their cuds contentedly while the old bull stood guard. The cattle-herons sitting on their backs or perching on their horns disturbed them not at all. Such a view of these great animals, usually so keenly vigilant and suspicious when man is privileged to see them, was an invaluable experience for a taxidermist who had come to Africa to observe peaceful animals before attempting to mount them in groups that must be absolutely true to nature. This scene on the edge of the swamp with the buffalo at ease on the little knoll is the model for the Buffalo Group that Rockwell is now preparing.

The specimen most desired was a bull—a large mature bull, but not an extreme or unusual animal. In such a selection, my husband had a very definite plan. He required the specimen to be above the average—fine and typically mature, but he did not wish a specimen to be so oversized or such a 'record' as not to

represent faithfully a splendid adult of the species. An oversized animal may misrepresent as much as would a poor specimen, undersized and immature.

Even from the vantage point of the boma Rockwell found such an animal difficult to select. After studying the herd for some time, he decided on his specimen and fired. The buffalo fell some distance from where the herd stampeded. It was now necessary for Rockwell and his gun boy to go into the swamp in order to locate the kill. Angry grunting and snorting told them that the survivors of the herd were in no mood to be tampered with. Finally the bellowing became so nerve racking that they decided to beat a retreat. On reaching the edge of the swamp they climbed the tree again. To their surprise, all the buffalo had gathered around their fallen leader. Because of their menacing attitude, Rockwell was unable to claim his specimen until late in the afternoon when the animals wandered to a remote part of the swamp to graze.

The day Mr. Eastman and Mr. Pomeroy left the Theba for Nairobi they lunched with us. It was then planned that we should meet in Western Tanganyika and that later Carl and I should join Mr. Pomeroy on his hunt in Eastern Tanganyika for greater koodoo, one of the most important of all the groups. After thinking the matter over carefully for two or three days my husband decided to leave Rockwell to continue the buffalo hunt and for us to go on at once into Western Tanganyika to see the lion country and, if everything seemed propitious, to collect a group of plains animals which he had not found it possible to do in Kenya. He accordingly dispatched a letter to Philip Percival, who knew the country well and who was then in Nairobi, asking about the requisites for taking Kenya native servants across the border, and inquiring also about the possibility of buying petrol en route. He also wrote to Martin Johnson in language that seemed prophetic in the light of subsequent events:

"We are 'heading in.' We shall leave here in about a week—Mary and I—to camp on your trail till we overtake you in

Tanganyika. Writing Phil (Percival) for details of journey. Perfectly convinced that if I continue to take myself and my work so seriously it will result in complete disaster. Perhaps, we'll have a bit of fun with the lions.

Love

Ake."

Following our departure, Rockwell made a second trip down the Tana over the same country that he and Carl had traversed together. On this excursion he had the good fortune to encounter a herd of one hundred and fifty buffalo, which may have been the remnant of the herd that Carl had observed and hunted twenty years earlier. The animals were grazing on the open plains. As they had probably not been molested for a long time, he was able to work up close to them. As the result of a short but extremely toilsome hunt, he added a fine old cow and a calf to the collection.

## CHAPTER X

### THE SWAN SONG OF OLD AFRICA

THE idea that Africa is the 'world's zoo' is indelibly impressed upon the general mind. How often we hear a sportsman, returning from his first trip to Equatorial Africa, announce that 'the supply of game is apparently inexhaustible.' Contrast with that view the statement of Philip Percival, who to-day knows Africa as well as any other white hunter has ever known it. "The *last bit* of old East Africa," he told us, "is the lion country of Tanganyika. And it is going fast." Without exception the few remaining men who have known Africa intimately for many years estimate that at the present rate of destruction even the exploited and much talked of lion and antelope country of Tanganyika Territory will be 'finished' within the next five years.

Without a proper basis for comparison, many things which we witness with our own eyes may deceive us. The opinion of the man whose African experience is limited to a few months spent in the game fields is of little worth, because he has no means of comparing the Africa of to-day with 'Old Africa.' To one whose experience with big game has been restricted to an acquaintance with an occasional moose, bear or deer, any giraffe will look enormous; any herd of thirty or forty antelope will seem an 'abundance of game.'

Basing his judgment upon an African experience extending over more than thirty years, my husband realized this ultimate fate of the African game. It not only saddened him but it motivated his interminable effort to bring to fruition his dream for African Hall. It strengthened his determination to work for the conservation of wild life in considerable areas in Africa through the establishment of a series of National Parks.

My own opinion on this subject naturally reflects that of my



husband and his friends of the 'Old Guard,' whose common sorrow at the passing of the old days became the subject of many a memorable conversation in our camps and in our Nairobi home. Certain it is that the wild animals of Africa are making a losing fight. Their backs are against the wall. The real problem of the student of primitive Africa, therefore, is not to defend himself against wild animals, but to see them. His real difficulty is not to make peace with 'dangerous tribes,' but rather to find them living according to their ancient customs. Economic interests have advanced so swiftly and surely upon this last stronghold of big mammals and savage peoples that the old Africa has for the most part passed into history. The modern high power rifle, the widespread and keen interest of both men and women to go to Africa to hunt big game, the fact that both white settler and native kill for meat—all these spell the rapid extermination of the wild life of Africa. Furthermore, Africa's national parks are only in their infancy. The game reserves have served certain ends of conservation, but they are not enough. All too easily they can be diminished or even abolished.

I caught my first glimpse of the game, as I suppose nine out of every ten African travelers do, when my husband and I passed through the Kenya Game Reserve enroute from Mombasa to Nairobi. While I revelled in the sight of these strange denizens of the wilderness, my husband, entering Africa for the fifth time to study and collect, was saddened by the spectacle before him. As he contrasted the Kenya Game Reserve on that morning in February, 1926, with the game fields he had known in 1895 and 1905—even in 1910—the few animals that we saw there seemed to him the last pitiful survivors of the primitive herds. And this was in protected territory!

As the day advanced and my husband talked of early days in British East, I recalled Buxton's description of his journey over the same railroad in 1899 and Roosevelt's account written ten years later. From the train windows Buxton had noticed rhinoceros, hartebeest, gazelle, zebra, ostrich, impalla, steinbuck, and

wildebeest in numbers which he had 'dreamed of but never hoped to see.' A single herd of wildebeest he estimated to contain no less than three thousand individuals. In a column four miles long they had marched along the railway tracks as if to invade the newly settled village of Nairobi. Roosevelt, on his entering journey 'through the Pleistocene,' viewed the herds from the vantage point of the cowcatcher. He describes not only the great abundance of the game, but also the half amusing, half annoying conflicts between engine and animal that were frequent in those days along the Kenya-Uganda railway. The very night he journeyed to Nairobi, giraffe in crossing the track interrupted communication by knocking down some telegraph wires and a pole.

Our own journey was uneventful. More and more, as the miles sped past, I realized that my appreciation of the moment resulted not from witnessing the spectacle of the game herds, but rather from the thought that I had been privileged to see an historic region before it was completely finished, and also from the feeling of unreality that crept over me when some animated relic of prehistoric times stalked into view.

As I have previously said, we found game in the Lukenia Hills and on the Athi Plains so rare that my husband was unable to complete his collection in that locality. He finally sent Rockwell into the remote Kidong Valley for the necessary specimens. Furthermore, in order to give our black boys meat once a week as we were bound to do, we frequently made purchases in the Nairobi meat market and bought sheep from the native Wakamba herders. To provide this weekly ration by our own guns would have meant hours of hunting the few shy antelope remaining on the plains. And yet in 1909—on Juja Farm, the estate of Sir William Northrop McMillan—Colonel Roosevelt had easily collected hippo and rhino and many varieties of antelope. Here, also, in the same year, Carl in the brief space of half an hour had collected enough antelope for an entire museum group. As quickly as he shot the specimens, his boys had carried them to him to be skinned and skeletonized. He had not even needed to leave



WILDEBEEST GRAZE IN ONE OF THE "GAME POCKETS" OF TANGANYIKA TERRITORY.

*Photo. by Carl Akeley.*





*Photo, by Carl Akeley.*

CARL AKELEY BELIEVED THE RHINO TOO STUPID TO BE EITHER ACCURATE IN HIS OBJECTIVE,  
FIXED IN HIS PURPOSE, OR VINDICTIVE IN HIS INTENTIONS.



the shade of a big acacia tree. Cheetahs and leopards skulked above his camp on the rocky ridges of the Lukenia kopjes, often frightening bands of curious, chattering baboons which congregated there. On the open plains before him, large herds of hartebeest, wildebeest, impalla and zebra grazed in peace.

John T. McCutcheon, one of his companions on this 1909 expedition, on learning after his safari was disbanded that the departure of his boat would be delayed for several days, drove out in a donkey carriage for a final shooting trip. Within actual sight of the house tops of Nairobi, he gave chase to three lions, saw in all fifteen species of wild game, some of them in large numbers, and returned to town with two Thomson's gazelle.

On our way to the Northern Frontier of Kenya, a three and a half day motor journey over the foothills of Mt. Kenya to Meru and thence to the Northern Eusso Nyiro, I saw all told only five or six antelope. In this same territory twenty years ago, Colonel Roosevelt and his son, Kermit, had hunted successfully for eland, lion, cheetah, gerenuk, buffalo, and, at Meru boma, had obtained elephant and rhino.

The lion is perhaps the most misunderstood of African animals. Frequently have I been asked the question, "Are not all lions in Africa man-eating lions?" There is an increasing tendency to justify the wholesale slaughter of this regal beast by claiming that his existence imperils human safety. The casual reader of the daily press might almost suppose that combat must be waged in Kenya to determine whether man or lion shall rule there.

A Member of Parliament, who is also a member of the Joint East Africa Board, recently replied to a complaint published by a 'Disappointed Sportsman,' in the London *Times*, December 29, 1927, concerning the rate at which the African game is disappearing. In a long letter the statesman declared that the game is far too plentiful, that it ought to be destroyed, and that, according to his personal observation, the dangerous game so menaces the African native that he goes about in fear and trembling. Before the appearance of this letter the English press had got

hold of some exaggerated stories of man-eating lions, which were cabled to America. These reports, published early in January, 1928, stated:

"A new and terrible breed of man-eating lion, which makes organized raids on native villages in packs of twenty or thirty and transmits its appetite for human flesh to its cubs, has appeared in the British African Colony of Kenya.

"Night after night, packs of a dozen or two dozen lions and lionesses raid the native kraals, crash their way through the flimsy roofs or walls and bear away screaming victims to devour at their leisure.

"Women and girls drawing water at the rivers and boys guarding herds of cattle are being carried off and hundreds of head of cattle eaten.

"Five hundred lions, it is estimated, have gained supreme control over hundreds of square miles of territory."

I cabled to Mr. Leslie Tarlton in Nairobi on the fourth of January, 1928, asking for a verification or elucidation of this newspaper account. He replied that the report was founded on the lions' depredations on Masai cattle. With the authority of the Game Warden of the Colony, he stated that 'man-eaters are unknown in Kenya at present. No one has been eaten for at least the past eight years and not a single man-eater has been recorded officially or reported unofficially.' If these 'man-eating lions' confine themselves to preying upon Masai cattle, they behave only as we would normally expect in a region where the extermination of the antelope herds deprives them of their natural food. The lion kills, just as the human meat-eaters of the world kill, for food; but he never kills wantonly, for sport or in revenge. The jackal that waits for the remnants of the lion's feast often goes hungry, for the lion takes no more than he needs. When his kill provides more than enough for his day's meal, he usually lies up near-by, guarding his meat for the morrow.

The lions that inspired these newspaper stories inhabit the Southern Game Reserve, which is also a Masai Native Reserve.

Their boldness was encouraged when the Masai warriors, long renowned for their skill with shield and spear, were officially disarmed. When the droughts end the grazing on the plains of the Reserve and the Masai herds wander into the bush, the lions not unnaturally fall upon an occasional ox or cow and the toll of slain cattle is increased. To meet the situation, the government ordered a number of lions killed, and, as a further insurance, re-armed picked bands of Masai warriors with their spears and shields. As a result the trouble is at an end.

In the *East African Standard* of January 16, 1929, both the editor of that newspaper, Mr. R. A. Mayer, and the Game Warden of Kenya Colony, Captain A. T. A. Ritchie, lament for the sake of writers of fiction and romance that Kenya affords no man-eating lions. Captain Ritchie writes that even in the case of the disturbance in the Masai Reserve in 1925, the only deaths were due to injuries. During the five years he has served as game warden, he has not heard of a single case of man-eating in the colony. Mr. Mayer points out that the disarming of the Masai, which has been interpreted and criticized by the English press as a political move intended to protect the 'man-eaters' and so to frighten the natives from their land, thus making it available for alienation, was in reality a governmental policy introduced at the request of the Masai leaders and with their support. Diverted from their warlike pursuits, the Masai are now operating an annually increasing number of dairies and trading centers and have become a real economic asset to the colony. Mr. Mayer concludes by saying, "The public here will bitterly resent and oppose any organized effort at Home or elsewhere to interfere with the Game Reserves or to encourage a policy of extermination. They are quite capable of adjusting their game laws and preserves to changing conditions without advice from ignorant sources. If that fact is realized, propaganda and untruths of the man-eating lion type, will no longer be taken seriously by the gullible minds for whom it is skillfully prepared."

The Uganda Game report of 1927 dismisses lions in two lines

and makes no mention of man-eaters. Captain C. R. S. Pitman, Game Warden of Uganda, wrote me early this year that four lions had killed native cattle and killed or injured a few natives in the Kigezi district. As this is a region through which I have traveled twice on foot, I know it to be one in which all the antelope have been killed off.

Variations of the well authenticated story of the man-eating lions of Tsavo, told in epic form by one of Africa's great men, Colonel J. H. Patterson, are, of course, still current. At the time of the building of the Kenya-Uganda Railway, twenty-five years ago, some of the East Indian workmen died and were placed in the bush without proper burial. The lions found and devoured the bodies lying on the veldt, thereby acquiring a taste for human flesh. The appetite so developed proved insatiable and finally drove them to invade the huts of the workmen from which several were dragged out alive and eaten.

A second instance of lions that acquired the taste for human flesh and invaded native huts near Sanga in Western Uganda is a current story in Africa and was officially reported by Captain Pitman in 1926.

"The Sanga man-eating lions were virile, breeding animals, in whose habitat a sudden reduction of game took place due to deaths from rinderpest," wrote Captain Pitman. "The game was then still further reduced to virtual extinction by anti-rinderpest measures which led to the destruction of immense quantities of antelope and wart hog.

"The starving lions were driven to raid the flocks and herds of the local inhabitants, and soon came into conflict with man either accidentally or intentionally. It is quite probable that many lions, driven through sheer hunger to hunting in troops, shared the first human victims."

In a country in which tales of hardship, adventure and sudden death pass by word of mouth from tribe to tribe and from town to town, the story of the man-eaters of Tsavo and that of the lions of Sanga are told and retold. Obviously if it were a common



occurrence for lions to make their meal upon human flesh, these two stories would not be so outstanding.

A lion has no chance whatsoever against the hunter who builds for himself a boma in the trees and who after placing a zebra as a lure awaits the coming of the lion throughout the night. So eager is the inexperienced sportsman to obtain a lion that I doubt if he ever stops to analyze the situation in which he places himself. It is by no means a fair and open contest. It savors somewhat of guerrilla warfare in which a well-armed aggressor securely hidden in ambush picks off the unsuspecting non-combatants of the region. If the lion actually were a curse—vermin to be exterminated—it would be a different story, but all who have watched him at rest, at play and in fair fight are unwilling to class him as vermin. To be sure he takes his toll of the animal life of the veldt. As long as any part of wild Africa remains the law of the jungle must persist. Should the carnivora be exterminated from the earth? I am by no means sure that it is even a debatable question.

During the five weeks which Carl and I spent in the so-called heart of the lion country of Western Tanganyika, we saw one hundred and forty-six lions. Not one of them evinced the slightest inclination to be aggressive unless wounded. Without exception they conformed to the creed my husband formulated: "*The lion is a gentleman*; if allowed to go his way unmolested he will keep to his own path without encroaching on yours."

As I believe I have enjoyed with my husband one of the most remarkable experiences possible for any one to have, in discovering and watching peaceful, friendly lions in their native haunts, it is my personal opinion that it is rank injustice to consider the lion as vermin and to begin a wholesale attempt to exterminate him. Without question the lion is the King of Beasts, superlatively endowed with such regal attributes as courage and dignity, beauty and grace.

On the edge of the Gorilla Reserve in the Belgian Congo, in a country almost devoid of antelope, hungry lions came into the

White Fathers' Mission and killed cattle there. Yet night after night we slept in open tents without guard or defense except our guns, and with three hundred unprotected porters encamped close by, and not a single lion came near our camp. The natives acknowledged their fear of the leopards that frequently prowled around, but never did they express themselves as being afraid of the lions. This mental attitude on the part of the native must be based upon precedent—a precedent of danger from the leopard, of security where the lion is concerned.

The banks of the Tana, where in 1910 counting the ubiquitous rhino and hippo was the chief pastime of Carl's party, we found almost a complete waste. The buffalo herd inhabiting the area along the Theba had been reduced from five hundred to perhaps fifty or sixty individuals. This region between the Theba and the Tana rivers, once alive with buffalo, now tells the same story of game extermination so apparent in other parts of Africa. After Carl's disheartening trip with Rockwell to the junction of these rivers, during which he saw almost no game of any kind, he wrote to the American Museum:

"There is only a pitiful remnant of the great buffalo herds of the past and of the other game, almost nothing. This is a condition we have found everywhere we have been in Kenya Colony. I have not appreciated the absolute necessity of carrying on the African Hall, if it is ever to be done, as I now do after this painful revelation. The old conditions, the story of which we want to tell, are now gone, and in another decade the men who knew it will all be gone. The unhappy remnant of the magnificent fauna of Kenya now has its ear attuned to the rattle and bang of the motor car, which carries the alleged sportsman in his mad chase across the veldt in the hope of having the honor of killing the last of a given species."

It required several weeks of hunting along the Tana and in Western and Eastern Tanganyika before the necessary buffalo specimens were finally secured.

In short, it was only by penetrating to the isolated giraffe

country beyond the Northern Eusso Nyiro, to the game pockets of Western Tanganyika, and to the Belgian Congo that we got away from the beaten highways of travel and found herds of game suggestive of primitive times.

When the African traveler purchases his game license, he is presented with a formidable compilation of conservation laws. Wherever he travels he encounters game wardens, district commissioners and rangers. But good laws and capable officials are not in themselves sufficient to insure the preservation of the game. To be truly effective they must be reënforced by enlightened public opinion, not only in Africa, but in Europe and in America as well.

Although Kenya Colony is rapidly becoming an agricultural country, it will remain vastly interesting both to the European and to the American traveler. And it is often from the thoughtless acts and ill-considered statements of the visitor or casual sportsman, uninformed as to the actual conditions, that those who would bring about the preservation of African wild life have most to fear. As I have said, African game still seems plentiful to a man who is unfamiliar with its tragic history of depletion. Out of his inexperience he misjudges the numbers of surviving animals and concludes that amidst 'abundance' he may hunt without restraint.

An American who had decided that he must make an African hunt to round out his list of social achievements once came to my husband for suggestions. Carl spent two valuable hours advising him and when he was ready to leave the studio, he said, "Very well, I shall write Mr. So-and-so," naming a well-known professional hunter in Africa, "and direct him to arrange for a safari of three months. When I reach Nairobi I shall show him the list of things I want to kill and tell him that, if he can manage it so that I can shoot my game in three weeks, I will pay the full amount for the three months' safari. What I really want is to kill these things and get out of the d—n country as soon as I can!" It is to be regretted that such men cannot be kept out of Africa.

That the disappearance of big game is due in part to ruthless slaughter is an undeniable fact. Sometimes men and women who at home display no sanguinary impulses commit atrocities in the African game fields that are incredible to one who has not witnessed them. It is indeed sickening to see a hunter's car, decorated with the heads of oryx, shot for no other reason than to obtain the horns, the carcasses left to rot or be eaten by hyenas; to see a sportsman's gun targeted on the gaudily marked torsos of statue-like little Thomson's gazelles; to come upon little monkeys, useless as trophies, discarded by the trail or a rare antelope, pierced by a dozen bullets, the victim of the killer's unsteady aim. We met in Nairobi, one 'sportsman,' who on good authority had killed twenty-eight lions and wounded twenty-nine more which, without even attempting to finish them off, he had allowed to go off in the dongas there to suffer the torments of slow death. It is also deplorable that a hunter wishing to achieve merit as a 'lion man,' should have shot more than sixty lions, and in order to obtain that number should have killed not only males but a large number of mothers and cubs—the women and children of the lion family.

Such disgusting manifestations of the killer impulse rightfully lead African game wardens and conservationists to look with suspicion upon all newcomers, perhaps even upon those who may come to Africa in the interests of science. In sharp contrast should be noted the recent African Hall expedition<sup>1</sup> sponsored by G. Lister Carlisle, Jr., of New York, on which both he and Mrs. Carlisle spent more than six months in the best game areas of Africa without firing even a single shot. The expedition collected only necessary specimens. A true sportsman is 'one who loves the game as though he were the father of it.' His interests are not always confined to killing and therefore do not, necessarily, run counter to those of the conservationist. Moreover, the true sportsman realizes that it is the duty of his own generation to pass unimpaired to the next the natural assets of a country; that

<sup>1</sup> The Carlisle-Clark Expedition for African Hall, 1928.





*Photo. by Carl Akeley.*

GRANT'S AND THOMSON'S GAZELLES FED IN UNCONCERN WITHIN A FEW YARDS OF THE  
AKELEYS' CAMP IN TANGANYIKA.



his son and his grandson are as much entitled to a glimpse of old Africa as he; and that the scientists of to-morrow must not be deprived of the opportunity to study the strange African species in their attempts to supply missing chapters of the earth's history. As A. Blayney Percival has said, "any animal is infinitely more interesting alive than dead." To know African animals and secure representative trophies the sportsman must be counselled by a trained hunter or gun boy. He must restrain the impulse to shoot in that exciting moment when he catches the first glimpse of an unfamiliar animal. He must be willing to hunt patiently until, as a result of observation, he is able to select a really large specimen for his bag.

The ends of conservation may further be served by ridding the minds of travelers of the fallacious notion that all large mammals are aggressive. Only once during thirteen months of hunting in the remote regions of Equatorial Africa was a shot fired by any member of our party in self-defense. A sportsman of the finest instincts will doubt his own judgment as to the abundance of the game and, accepting the opinion of the African veteran that absolute extinction threatens many species, especially the rhino, will refrain from shooting to the limit of his license. Entering Africa in such a spirit, the American can do much to reënforce the efforts of the colony's officials along the lines of game preservation. The fact that colonial revenues may be enormously increased if the game reserves are made into national parks to which tourists will be attracted in greater and greater numbers is an argument for conservation that must appeal to the most practical. Meanwhile, unless men become imbued with the true sportsman's or the conservationist's ideas, ruthless slaughter will continue to increase, and the early finish of most of Africa's big game will inevitably follow. A vanished species can never be recalled. And Africa without her wild denizens would be only a country of memories—a body without its living spirit.

From the time that England established a protectorate over East Africa in 1895, there have been those who have advocated

conservation measures. Farsighted pioneers pointed out the loss to South Africa resulting from the extermination of the game—the disappearance in some cases of entire species—and called attention to the fact that in British East Africa, a region only twenty days by ship from Europe with a railway entering the hinterland, the game would be doomed to even more rapid destruction if left unprotected. In London as early as 1899 an international conference of delegates from Germany, France, Italy, Portugal and the Congo Free State met to discuss the preservation of African game, to the end that each power represented should establish adequate reserves, protect immature and breeding animals and rare animals in danger of extinction, and forbid the sale of small elephant ivory. Previous to this conference game regulations had been enacted in British territory. Hunters were required to obtain licenses to shoot. A heavy fee was enacted from travelers; a lighter fee from residents and officials. These licenses limited the number of rare and slow-breeding animals, such as elephant, rhino, hippo, buffalo and giraffe, to which a sportsman was entitled. To meet changing conditions, these early ordinances are continually being amended by those who understand the necessities of the colony and who sympathize both with the white population and with the original inhabitants, whether animals or men. At present a vigorous campaign is being waged in Kenya to make it illegal to hunt from a motor car. To stop this method of killing, which is totally devoid of the elements of fair play and sport, would save the game enormously.

The establishment of game reserves, where the animals multiply in accordance with the law of natural selection, has been until the present an important governmental policy in Kenya. The game that overflows the reserve furnishes meat for natives and settlers and sport for many Europeans and Americans. Although many have emphasized the facts that game, through the sale of licenses and the exportation of skins and ivory, has been the colony's greatest source of wealth and that the visiting hunter is the colony's best 'customer,' yet the skins of game animals



should not be allowed as articles of commerce; neither should game meat be allowed to be sold. In recent years, however, with the increase in white population, agriculturists have set up a counter claim. "The game must go," is the popular cry in certain sections where the white man is undertaking to breed stock or to raise coffee, sisal or tobacco.

It is inevitable that within a few years the settlers of British East Africa, Uganda, Tanganyika Territory and Rhodesia will need for agricultural development parts of the now fairly large areas constituted as game reserves. Obviously it would be of much greater value in the perpetual conservation of wild life even to reduce in size all such game reserves and to replace them with regularly established national parks which would have a proper working organization. Such parks should be widely separated to prevent possible epidemics from destroying the game therein. In them it would be as impossible to admit any hunting party as it is in the Yellowstone National Park of the United States to-day. Realizing that the nations of Europe rightfully require their colonies first and foremost for economic purposes, we believe that such an extension of a system of national parks throughout the great continent of Africa is the only possible way to prevent a great diminution or almost the complete extinction of many species within a comparatively short time.

The first African national park, created in 1925, is the Parc National Albert located in the Kivu District of the Belgian Congo, of which in my concluding chapters I shall speak at length.

The second, the Kruger National Park established in 1926, is in the northeast part of the Transvaal Province of the Union of South Africa. There it is unlawful to kill, injure, capture or disturb any animal or to take or destroy any nest of any bird. Only a dangerous animal may be killed in defense of human life, or to prevent personal injury. The violation of these laws is punishable by heavy fines, or in default of payment of such fines, by imprisonment with or without hard labor for a period of not less than three months nor more than eighteen months. If a person

has been previously convicted of such an offense, he may be sentenced to prison without the option of a fine.

My friend, Colonel J. Stevenson-Hamilton of London and South Africa, one of the founders of Kruger National Park, has aptly said, "The conservationist is frequently forced to remember that animals have no votes." Yet certainly we must hope that there is a majority of right-minded and unsanguinary men and women in the world, who are willing to work for conservation; who prefer to shoot with a camera rather than with a rifle; who will enjoy traveling about in a peaceful, untouched natural sanctuary where wild life is unafraid, rather than being photographed astride of a dead rhino or an elephant. This generation will go to Africa and will still see and enjoy the thrilling sight of fair-sized herds of antelope, buffalo, elephant and of peaceful lions at their play. It is nevertheless a fact that unless active steps are taken *now* to establish national parks the younger generation will never have even a faint conception of old Africa and—except in the Parc National Albert and in the Kruger National Park—their children will know an Africa which is wholly economic.

Why should it not be possible for the nations of Europe to do in their vast areas of Africa at least as well as the lovers of wild life have done in tiny Holland, where conservation has been so admirably accomplished? Why should the controllers of empires permit the world to become wholly industrial? Why should all natural sanctuaries for men and for animals be transformed into tilled fields and towns and arteries of incessant travel? Is there not in the minds and hearts of a majority of men in the world to-day a need which commerce will not satisfy?

## CHAPTER XI

### LIONS AND LUMBWA

TAKING only six porters and our tent boys, Carl and I, with Radatz, left the mosquito-infested swamp on the Theba on July 21st. The day was very hot and humid and threatening clouds obscured the sky as we bumped over the rock-strewn plain and into the dusty, deeply rutted highway. Beyond Fort Hall we had a fair road into Nairobi but our motor lorries were so burdened that the radiators boiled on all the grades. About two-thirty we stopped at the Blue Post Inn, and while waiting for sandwiches and tea, we refreshed ourselves by walking down the narrow trail through a cool leafy grotto to the beautiful falls of the Thika whose dashing spray cooled and enveloped the forest and us. To our surprise we were overtaken by a drenching rain about four o'clock and the roads immediately became soft and slippery. When in the continuing rain we reached the refuge of our base house in Parklands, we were told that unexpected and heavy rainfall had been occurring during the previous two or three weeks.

We were glad to receive here a letter from Philip Percival instructing us about the formalities of entering Tanganyika Territory.

For years my husband had been interested in the game fields of Tanganyika, particularly since, in 1925, he had a long visit with Dr. Saxton Pope, of San Francisco, who had hunted lions with bow and arrow in the region made famous by the years of hunting, photography and exploration of Leslie Simson, also of California.

Then in Africa we heard many stories of Tanganyika lions from Mr. and Mrs. Philip Percival. Mrs. Percival, who, with her husband, had had several weeks in the thick of the 'lion belt,' studying and enjoying them, and showing them to their children at close range, but never shooting them, had spent sev-

eral days in our Lukenia camp and at our Nairobi house. Her accounts were fascinating and alluring beyond imagination. Carl definitely decided that, even in the midst of his big job of collecting, we would somehow squeeze in the time to go into the Simson country of Western Tanganyika and, if possible, see these beautiful creatures at close range.

Two days in the town are short indeed between two long safaris. To give the customs an invoice of all supplies, on many of which duties were exacted; to obtain permits from the District Commissioner to take our East African boys into Tanganyika Territory; to restock with tires, petrol and food supplies; to repack chop boxes for a six weeks' trip into a country where no supplies are available; to grease our cars and overlook our motors; to appear before a judge to satisfy some native claim for salary and prove the native's bookkeeping in error; to prepare food supplies to go back to the buffalo camp—these were some of the details which kept Carl, Raddatz and me busy during eighteen hours of each day.

But our natives were always one of the worst problems in the town. There my banking and pay roll business began in earnest. Whether a boy had been with us for weeks or was a new employee just 'signed on,' he was bound to require a payment or advance of wages. He had to send money to his wife and children, he had to pay a doctor, or bury an aunt. His demand was always large. I used up a great deal of energy trying to make my boys economize and allow their wages to accumulate, but I might as well have saved my effort. With one or two thrifty exceptions, they all became possessed with a single idea—that is of going to the bazaar and spending their money.

All new employees required clothing for safari. The job of outfitting them was equal to preparing a large family of boys for school in the fall. I simplified it finally by getting a standard outfit at a certain shop, sending a letter and the money to the shopkeeper who fitted the boys in their proper sizes.



Whereas, the native servant would not dream of deserting in the field, he is conscienceless in the town. The moment our loads were unpacked they nearly all vanished except my personal boy, one porter, old Thomasi, Poli, the kitchen toto, and of course our old stand-by, Bill. Under these conditions, our menage still had to run full speed. My cook, newly signed on, required much time to bid farewell to his family and never showed up until evening. Bill and I cooked the breakfasts and lunches and Poli washed the dishes. But it was a bit of fun at that. The garden was once more a joy. The roses, lantanas, dahlias, poinsettias and pomegranates were again in bloom. My vegetable garden, which I had planted before starting north, afforded beans, radishes, turnips, carrots and lettuce in abundance.

The morning of our departure we were up at four-thirty and ready to start at nine. Then came the long wait for our boys to show up. Without Bill to help me in their absence I do not know what I should have done. Together we had packed all our beds and dunnage and closed all the chop boxes. It was twelve-thirty before the arrival of the last straggler enabled us to make our final report at the District Commissioner's office and clear ourselves from the town. Crossing the eastern rim of the escarpment, the road dropped steeply down two thousand feet into the Kidong Valley where we turned abruptly south. Just before sundown we made a dry camp twelve miles out on the Narok road. Good wood was plentiful, and we used the water which for such an emergency we carried with us in petrol tins.

I shall not forget this journey. The weather seemed unbearably hot. I was extremely exhausted after long hours of work and lack of sleep. When we finally camped, I had so much fever that the boys put up my bed immediately under an improvised fly adjoining Carl's tent. I was so hot I could not endure the thought of going inside. Then came the inevitable chill and I was glad to have my bed moved into my tent. All night I fought fever and swallowed quinine. I was having my first attack of malaria. The

Kagio swamp mosquitoes had done their work well. About six in the morning I slept, and at seven, although Carl said we would not move camp that day, I told him I would rather go on.

At ten-thirty we were on the way and I drove the small 'Chev' as before. But when the sun was on the meridian my temperature shot up again, and when we arrived at Narok it had reached one hundred and two degrees. All during the day I was not conscious of a single bit of landscape, although we crossed the beautiful Mau Escarpment. I might have been 'sleep driving.' I just sat in the car and drove.

The next morning I was able to eat the first food I had tasted since leaving Nairobi and we moved our outfit more promptly than we had the day before. Early in the afternoon we reached the Guaso Nyrok where Boyce Aggett, one of the best bongo hunters, has a small trading post. I remember his talk of Lumbwa spearmen and bongo hunting, and also his asking Carl where he planned to camp that night, and Carl's reply, "Wherever Mrs. Akeley's temperature reaches one hundred and two degrees." There was not much of interest for me in that day's journey, but we made a good run and reached the camp of the white hunter, A. J. Klein, who with enviable hardihood and tireless effort, traveling on foot or with ox-team, had cut out a rough motor roadway into this trackless country, now increasingly popular with sportsmen and camera men, since it is one of the few remaining strongholds of the big game of Africa. Here a most beautiful spring gushes out of the ground. It is called Simson's Spring from its discoverer, Leslie Simson. It is one of the most desirable spots I have seen in all Africa. The spring is a full, abundant fountain-head of clear, cold, sweet water outpouring a few yards above the camp. It is a boon to white travelers who frequently transport the water a hundred miles to their camps. Here Klein has built a number of grass and mud huts and his natives cultivate an extensive garden. Near at hand the massive trunks and heavy foliage of many large trees cast a grateful shade.

It ran us hard to move our boys out of Klein's camp. A long



*Photo. by Mary L. Jobe Akeley.*

CARL AKELEY AND GEORGE EASTMAN (EXPEDITION SPONSOR),  
IN TANGANYIKA TERRITORY.



*Photo. by Carl Akelz.*

THE WILDEBEEST, ONE OF THE LARGEST AFRICAN ANTELOPES, IS TODAY ONE OF THE MOST NUMEROUS.





CARL AND MARY AKELEY WITH A GROUP OF LUMBWA SPEARMEN.

*Photo. by Martin Johnson.*



*Photo. by Bill.*

MRS. AKELEY DROVE THE CAMERA CAR FOR HER HUSBAND  
WHILE HE PHOTOGRAPHED THE LIONS OF TANGANYIKA  
WITH HIS OWN INVENTION—THE AKELEY CAMERA.



palaver was going on and one thing a native will not be denied is sufficient time to visit with another safari or camp. Two of our best porters, Kambi and Poli, came from this part of Tanganyika, and Bill on many long trips had been gun boy for Klein so there was a long and important *shauri* with Klein's native caretakers. But after we had cached petrol and supplies for the return trip and had filled all of our debbies and a thirty gallon tank with water from the spring, we pried the boys loose and traveled twenty-four miles further on to another dry camp. Since my temperature was only one hundred and one the world seemed a bit brighter. The next morning we passed the Kilima-feza gold mine where the manager, Mr. Ray, had told us that Mr. Eastman was camping about sixty miles away. We reached a camp twenty miles further on in the region where Leslie Simson, through long and painstaking effort, had accumulated many remarkable photographs of lions.

Frederickson, Mr. Eastman's motor mechanic, whom we had met at Narok, had prepared us for a terrible road beyond this point but we found it less difficult than he had led us to expect, except in one deep, sandy donga through which our boys had to push the cars. Beyond this a wide spread roaring grass fire gave us concern. It was set probably by the Masai who each dry season burn off the long dead grass so that their sheep and cattle may feed on the fresh green shoots which quickly cover the burn. Beating out the small fires immediately in our way, we barely succeeded in getting our motors through the rapidly converging columns of flame, when the fire overspread the track behind us. To have been caught and to have had the almost inevitable explosion of our petrol tanks would have been serious business.

We had journeyed into Tanganyika for the express purpose of 'playing' with lions and of seeing and photographing one of the last remnants of the great game herds that still survive in fair but diminishing numbers in a few pockets in the hills and in unmolested stretches of the open plains. That we should ever see even a bit of the old Africa as Carl had found it thirty years ago

had grown to seem well-nigh impossible as our months of difficult hunting for suitable specimens wore on. Here in Tanganyika, because of heat, water scarcity and a certain inaccessibility, the decimating gun of the sportsman has been less active than in almost all the areas of Kenya Colony and Uganda. Surely here, if anywhere, we might hope to find the unspoiled Africa we sought.

It was on the wide high plains near Simson's camp that the great herd of wildebeest were supposed to be at this season. The wildebeest, one of the largest African antelopes is to-day one of the most numerous. It is said that about the time of the outbreak of the War, the Germans in German East Africa, now Tanganyika Territory, had a plan of killing them in slaughter houses and packing the meat for European consumption. Since such a plan, if true, miscarried, the wildebeest are still free to roam the grassy plains, grazing first in one section of abundant feed until the supply is exhausted and then moving to some untouched pasture. In aspect at least this migration is comparable to that of the caribou of the northwest and of Labrador.

To our profound disappointment we saw in a vast area only one small herd though everywhere was abundant grass. Previously we had seen but two or three straggling animals. It made us heart-weary indeed to feel that we had come so far and that after all we might miss the migration. However, from there on to Harrison's Spring, twenty-four miles away, the numbers of wildebeest increased and we were fortunate in seeing giraffe (the dark leaf-patterned Southern Giraffe, quite different in coloration from his northern neighbor, the reticulated giraffe), impalla, zebra, kongoni and Grant's and Thomson's gazelle.

We hoped to find the Eastman-Pomeroy-Johnson party at Harrison's Spring but their camp fire had been rained on and their safari tracks and their hunting tracks led bewilderingly away from it in various directions. Obviously they had left the camp several days before and there was no defined road to follow. We therefore did the best thing possible—we traveled along high



ground bordering the hills and commanding a view of the surrounding plains. We had gone perhaps ten miles and were about ready to make another dry camp, when we saw a glint of canvas far away across the veldt. Taking a direct course toward it, we reached the Eastman camp late in the afternoon a few rods away from the Lower N'Gourmetti. In the dry season this river is but a series of turbid pools, but its fringe of large wild fig trees betokens an ample stream in the rainy season. After making our call on the Eastman party we pitched our camp on a high open treeless spot near-by. Camp making was a brief affair that day for we had trimmed our supplies down to the absolute necessities. As my fever was now abating I remarked to some one that it seemed much cooler here. The laughing reply was, "Wait until two o'clock comes and you are not in the breeze of a motor car and are trying to sleep and you will see how cool it is!" I afterwards realized the truth of these words, though having a siesta when two o'clock came was not on our program.

Five months in Africa had passed and we had not seen a lion. On the Athi Plains we had one day walked along a donga where two had been killed the evening before, and on the Northern Frontier, we had occasionally seen the impression of an enormous pad in the sandy track of the open veldt and had heard the Sam-buru natives tell that they had sometimes seen them at their kills. Now, for the most part, lions in Kenya are few and far between, and even on the Mau and the Uasin Gishu Plateau, where in 1906 Carl had killed his far-famed magnificent black-maned lion of Molo—the first black-maned lion killed in British East Africa—they are scarcely more than a memory.

Shortly after reaching the Eastman camp we were told that forty Lumbwa spearmen were expected to come in for a lion hunt and that motion pictures were to be made of this time-honored native ceremonial.

It is not a difficult matter to persuade a band of African natives to stage a lion hunt for the white man. Such a drama was arranged for Theodore Roosevelt when he arrived at Sergoi Lake in 1919

and he gives a thrilling account of it in the pages of 'African Game Trails.' Eight hundred Nandi warriors accepted the invitation to participate in this lion hunt and great was the disappointment of the blacks when only sixty or seventy of their number were chosen. Roosevelt attributed their eagerness to the fact that the peace imposed upon the African tribes by British rule left lion-spearing one of the few pursuits in which a young warrior could win renown.

Once in 1910, in the midst of his exhausting hunt for elephants for the American Museum of Natural History, my husband, seeking rest and diversion, had brought together a band of one hundred Nandi natives for a lion hunt. While they pursued the lion with spears and shields and finally ran him to bay and to the finish, he secured the first motion pictures of this historic contest between naked savage and the king of beasts. Later, encouraged by the patronage of Mr. George D. Pratt and Mr. Childs Frick, he immortalized this theme in his life-sized sculptures, 'The Lion Spearing of the Nandi.' The sympathetic interest and generosity of President Stanley Field of Field Museum, Chicago, enabled him to have these groups cast in bronze just before our departure for Africa. These sculptures are now in the American Museum of Natural History and in the Field Museum of Natural History.<sup>1</sup> Because on the occasion of the Nandi lion hunt his camera proved inadequate, he applied himself to the invention of a camera, which would picture the swift action of animals both at close and at long range. The Akeley motion picture camera<sup>2</sup> is now used extensively on scientific and photographic expeditions as well as in aviation. Carl gave it its supreme test in 1921 when among the Kivu volcanoes of the Belgian Congo he secured with

<sup>1</sup> It was a matter of great joy and encouragement to my husband that in 1926 he was able to see the formal installation of the originals in their temporary quarters in the American Museum of Natural History in New York, and also the unveiling of the replicas in the entrance to Stanley Field Hall in the Field Museum of Natural History.

<sup>2</sup> In May, 1926, the John Price Wetherill Medal was awarded by the Franklin Institute to Carl Akeley for the invention of this camera.

it the first motion pictures ever made of wild gorillas. He was now intensely interested in witnessing the performance of his own camera in photographing the contest that had prompted its invention.

When Carl made his first African expedition in 1896, a camera was considered by more conservative museum men an unnecessary encumbrance and was included in the equipment of the party with some hesitancy and doubt. The value of field photographs as natural history records became more and more apparent to him as he witnessed the havoc being wrought in the big game fields. He considered it especially important that accurate motion picture records of undisturbed wild animals and primitive natives should be secured while this was still possible and that these should be widely disseminated for educational purposes.

He believed that museums and other scientific institutions should sponsor the making of life-history animal pictures as a protest against the distribution by commercial organizations of films that freely employed inaccurate titles and 'fake' photography to gain popularity and yet purported to be true natural history.

Believing in Martin Johnson's ability as a camera man, in his eagerness to seek out and photograph primitive tribes and peaceful wild animals in their African home, in his earnest desire to disseminate natural history fact through motion pictures, Carl had been largely instrumental in securing for Johnson the recognition and the backing of the American Museum of Natural History. In New York he had given much time and thought to the development of plans for the Martin Johnson African Expedition Corporation, which enabled Johnson to return to Africa for five years of motion picture work under the auspices of the American Museum of Natural History. In his studio and in his camera shop, he had spent many days with Johnson, designing for him the most efficient battery of cameras ever taken into the field. Carl now wished to assist Johnson in Tanganyika in this attempt

to secure for the American Museum a more complete and wholly truthful record of this battle which he had often described as the most vivid drama in all Africa.

It was therefore arranged that Carl should work one motion picture camera while Johnson worked the other. Carl accordingly removed the sun canopy from his motor truck and put in a permanent base for his motion picture camera. That afternoon we took the truck out to test the camera device. The sun beat down upon us and the unloaded truck proved a most erratic and unwieldy thing to handle. However, it was decided that I should drive it for my husband in the lion spearing show.

The show was both spectacular and affecting. For ten days we trained our cameras on this ceremony which to white man and native alike was wholly serious. Added to this experience I obtained from their headman, Arap Malil, with Philip Percival as interpreter, the story of what lion spearing means to the Lumbwa.

Living south of the Mau Escarpment in a corner between the Masai and the Kisii, the Lumbwa are ruled according to ancient custom, by an hereditary chief, Langat Arap Makecha, 'old since long before the coming of the white man to this region.' The men are herders—their wives cultivate the fields. The number of their wives depends upon their wealth. Each man may have three or more so long as he pays each father-in-law at least four cattle and fifteen sheep. Their duty to the chief is implicit obedience, and when a hungry lion menaces their herds of cattle, and the chief details a group of men to hunt and spear the offending lion, no one refuses. On the contrary all who are eligible are eager for the venture. From boyhood each Lumbwa looks forward impatiently to that time when about the age of twenty and after circumcision, he becomes *el moran* and reaches man's full estate. Then and only then can he engage in a lion hunt.

When the hunt first begins, the Lumbwa with their Apollo-like bronze bodies shining with oil, with headdresses of black and white ostrich plumes, with fantastically decorated buffalo hide or cowhide shields and with long burnished spears, engage in a fine



parade. Next they form in a circle and their headman, the leader in the hunt, exhorts them, preparing them for the grave ordeal. They answer together, with a movement of spears toward their leader, now standing in the center of the circle with arms uplifted to the heavens. They pray to their god, Mungo, 'In-the-Sky.' Their exhortation in this crisis is the same as for any war or danger—the same supplication when once they warred with the Masai, still their enemies. "You made our feet, our hands, our eyes, our grass, so help us now," they pray.

All during the hunt the old men who stay at home pray too, the same prayer for the success and safety of the warriors.

When their prayer is finished they march directly to the donga in which the lion is concealed. Every man knows his place. The chief details the men for the advance guard—those who will first face the lion. If the lion is not there and the evidence is that he is not close at hand, a bugle sounds a retreat and they begin the hunt farther on in a more promising spot. The quickest and most accurate man casts the first spear; the others follow with lightning speed. The lion is dead. The warriors bound and leap about the fallen King of Beasts. While one man blows a bugle made of the horn of cow and waterbuck they chant the death chant of the Nandi, "*Okuri! Okuri!*" (He is dead! He is dead!) They chant loud and long, with unmistakable ecstasy in transport at their achievement. "When any one hears our '*Okuri!*' he knows lion dead. Even a child knows lion dead," Arap Malil, the headman, told me.

With such an exciting drama constantly before us our job of photographing presented a maximum of interest. Driving through thick tall grass well above the radiator of the car, we never knew when we would drop into a pig hole, the bane of rapid driving on the trackless veldt. Once when this happened and the wheel went down to the axle, we used the bleaching bones of a zebra in the absence of rocks as an aid in jacking up the car.

For our protection Bill in the back of the lorry was always ready with one of the elephant guns. Carl kept the other by his

side while he operated the camera. No task was lacking in its high pressure quality. When a charging buffalo one day scattered the natives and bore down upon our car, Carl cranked his camera until the buffalo, then almost on top of us, overspread his viewfinder and then grabbed his gun with, "Back the car, Mary!" as the buffalo almost grazed the radiator.

"I thought the buf intended to climb into the front seat," said Raddatz, enjoying the thrill of his life from the back of the car with Bill. I at least felt a little easier in my mind when the Lumbwa, reassembling, renewed the attack and the buffalo was finished off.

Another day, a lion had been wounded. He had charged past us carrying one spear in his head. He was very angry and dangerous. He dropped into ambush in a deep hole in the donga in a place which the Lumbwa found impossible or undesirable to enter with their spears. There was a long parley. The spearmen were irresolute—troubled and waiting. Doubtless it seemed to them as it would to any one knowing the ferocity of a wounded lion, a great hazard. Then Philip Percival stepped out of Mr. Eastman's car and walked quickly over to the donga. Two shots! We held our breath! From the Lumbwa that indescribable, long-drawn groaning sigh! Then Percival came back to us. He looked at us. "Phil!" we breathed our admiration. His blue eyes were shining, electric. Then in his cool low voice, "I was tired of having that beast suffer; but don't tell the Missis!" and he walked unconcernedly back to Mr. Eastman's car. Such sheer bravery when a demanding occasion arises is one of Percival's myriad enviable qualities which have made him one of the best loved and most profoundly respected men in all Africa.

Five spirit-stirring days quickly followed. Then the wildebeest began to travel out of the valley seeking better pastures. We next moved north to Simson's camp whither they had migrated and from which we continued our motion picture photography for nine days more. The lions were there in sufficient numbers and both cameras were successful.



*Photo. by Mary L. Jobe Akeley.*

"OKURI! OKURI!" (HE IS DEAD! HE IS DEAD!) THE LUMBWA CHANT OVER THE BODY OF THE SPEARED LION.



ONE LION HAS BEEN SPEARED. THE LUMBWA LEADER EXHORTS HIS WARRIORS FOR THE GRAVE ORDEAL OF ATTACKING A SECOND LION.

*Photo. by Carl Hixley.*





*Photo. by Mary L. Jobe Akeley.*

LEFT TO RIGHT: PAT AYER, DANIEL E. POMEROY (EXPEDITION SPONSOR), PHILIP PERCIVAL AND CARL AKELEY AFTER A MORNING OF PHOTOGRAPHY WITH THE LUMBWA SPEARMEN AND LIONS IN TANGANYIKA.



*Photo. by Carl Akeley.*

THE SOUTHERN GIRAFFE, UNAFRAID OF THE PHOTOGRAPHIC CAR, ALLOWED THE  
AKELEYS TO APPROACH WITHIN A FEW YARDS.

Wherever the herd of wildebeest forages, lions are almost sure to be in the vicinity. This antelope is one of his favorite foods and in view of their habit of herding together, it is not difficult for a lion to kill. The King of Beasts—and he is a superbly royal creature when one knows him intimately—kills only what he requires for his daily needs. He never slaughters or kills in excess, or for the love of killing as men sometimes do. He never stores up for the morrow. He satisfies his hunger on one kill, leaving only remnants to hyena and vulture.

## CHAPTER XII

### PLAYING WITH FRIENDLY LIONS

EVER since I had first talked to Carl's old gun boy, Bill, in our Lukenia camp he had announced more or less frequently that he wanted 'Memsahib to get a lion in Tanganyika,' the country he knew so well, and now that we were actually in Bill's country, he often mentioned casually that he knew a valley where there were '*Simba mingi sana*' (very many lions) and that he thought no one had ever shot there.

But in three weeks in Tanganyika, spent largely in hunting and camera work, I saw sufficient lions at close range to feel quite content not to take even one natural history specimen from Africa; vivid sounds and pictures indelibly impressed on my mind seemed quite enough. For many nights lions close to our camp had made the world reverberate to their roaring, and so close were they that as I lay in my cot, I could hear the long drawn intake of their breath, and when they later went out to kill, the stampeding zebra tripped across the guy ropes of my tent!

Shortly after dawn we started for 'Bill's country.' The indescribable blue of the morning sky was streaked with rose; the whistling wind was crisp and chill; and as we drove our little open camera car across the level stretches of the veldt, we felt grateful for warm sweaters and top coats for the sun had not yet touched the summit of the eastern hills. Two secretary birds, rare and beautiful in form and color and of amazing dignity of motion, were sitting by their nest on the top of an acacia tree, feeding their young. Herds of wildebeest, quietly grazing in long lines across the landscape, stampeded noisily at our approach. Statuesque grown-up 'Tommies' looked us steadily in the eye without giving an inch, the flick, flick of their little tails being the only indication that they were living and not sculptured animals. Their



little ones, for all the world like the little wooden animals in a toy Noah's ark, shy as young fawns, went jumping across the landscape, stiff-legged, and on all fours.

Topi stood gazing quietly in groups of twos or threes, their brown, satiny coats gleaming in the morning light. A cheetah walked cautiously through the tall grass, herding her two little cubs ahead of her toward the shelter of a low growing tree. Two fennec foxes playing on a brick red ant hill, whisked their fawn-colored bodies suddenly out of sight, only large ears and little beady eyes showing that they watched us as we passed. Three or four miles from camp, a large band of hyenas—we counted thirty-eight—were fighting over the half-devoured carcass of a wildebeest, apparently their recent kill. They moved but slightly at our approach and we photographed them in motion pictures to our heart's content.

It would be hard indeed to describe adequately our course through the obscure valley we now entered. On the African veldt it is more than difficult to determine distinguishing landmarks. This is due largely to the lack of outstanding hills and mountains with distinct topographical characteristics. Few stand in vivid outline against the sky and you find a familiar landmark repeated again and again in the course of a day's journey. I could certainly go again to the long chain of hills which marked our entrance to this valley but our devious way thereafter, the crossing of deep dongas, and wide plains is a matter of Bill's exclusive and unparalleled knowledge of this big Tanganyika wilderness. To see him steering our course through the maze of thorn and scrub and high grass, you would think him traveling by some unseen star, and I firmly believe that Bill has his star that guides him into strange places and leads him to disclose to us the mysteries of landscape and wild life which would never otherwise be revealed; and that his almost supernatural alertness of sense affords him a deep and quiet joy, in the realization of his own resourcefulness—approximating the high spots of human intellectualized emotion. His own unequaled native intellect, his quick absorption of all

'his Bwana' had taught him, his pride in his own ability and achievement, his loyalty and steadfastness of purpose, his insight into the minds of other men, black and white, make of Bill an outstanding personality.

For two or three miles we drove across an extensive plain filled with high grass which for lion concealment is equal to donga or forest. Once a lion is seen, or sees you in this deep grass country, all he has to do for self protection is to travel a few feet or rods as he may wish, crouching close to the ground, and then lie down in the grass. There he will wait until you are upon him, and the chances are very good if you surprise him by quick and close approach that you will have the lion's share of the 'surprise.'

On a little rise in this deep grass country we soon saw two hyenas and near them a lion. We approached cautiously to the spot where they evidently had finished their early morning kill. The hyenas were still there but the lion had vanished. We went on a little further to the crest of the next rise, and there we saw the lion and another hyena. The lion was sitting in the grass waiting for us. Bill using his glasses, said, "Lion not big, no mane." We watched him quietly. He soon got up, turned a broad side to us and walked deliberately away. I counted off his paces—one-two, one-two—in just the time of a measured ticking of a clock. We had not even interested the lion. We went on down through the valley. It was well stocked with small game—Granti, 'Tom-mies' and one fine herd of impalla. Bill climbed the side of a hill and herded the impalla down towards the camera, and as they jumped and vaulted and ran as only impalla can do, Carl made a motion picture of them.

We next turned down into a still wider valley and traveled not far from the rim of a donga filled with dense bush, large trees and deep grass. Carl was driving the car and intermittently watching the donga, an almost impossible feat in this country of many pig holes, fox holes and ant hills. We soon came upon a fine herd of giraffe, seven beautiful adults and five totos, but they were between us and the sun in a small thorn bush so it was impossible

to photograph them. We stopped to watch them. We saw one of the little totos take his breakfast and we finally got so close to the big old bull that we could see him wink his eyes. How easy it would have been to spend the whole morning watching these fascinating, prehistoric creatures!

We continued on down the valley, still keeping as close to the donga as possible. Here a recent fire had burned off the high grass and the going was much better. Soon Carl saw something moving across the donga. The sun was now high and the great heat waves were beginning to roll in and suffuse and distort the whole country in a shimmering mirage. "They may be only 'Tommies,' " he said. But soon we saw they were three lions sitting in the grass watching our approach. We went nearer. They dropped down a little in the grass as we advanced and then two others, a little farther on sat up to watch us too. Right between the two groups a big, dark-colored lioness suddenly appeared. She was determined to get a close-up of us. She came up the slope of the donga, and through the tall grass, traveling straight toward us. When she reached the edge of the deep grass, where it abruptly joined the burned veldt, the big cat lifted her paws high, stepping out full into the open with the grace and assurance of a queen. As she came into the open Carl seized his .475 and I had presence of mind enough to grab my Goerz and photograph her, but unfortunately there was no chance for Carl to move back to his motion picture camera to make the photographs that would actually count.

It was the most thrilling sight I had ever beheld. The lioness slowly but steadily stalked us with lowered head, keeping a slender green thorn bush, about three feet high, but no bigger than a cane, between us. Every now and then before she left the flimsy shelter of this bush she looked back to the others, doubtless to see if they were coming too. Then she left the thorn bush, stepping out quite boldly and with head still held low, she sat down a little to one side and back of a large tree. This survey of us was not satisfactory. The lioness got up and deliberately moved on,

reached the tree, walked back of it to the other side and came directly toward us. Not once did she take her eyes off us; not once did she hesitate. I was indescribably thrilled and fascinated. "If she comes five steps nearer I'll have to shoot," Carl said. With his gun on her, he tooted the motor's horn. She paid no attention and came a step nearer. He next started the engine but she paid no heed. I photographed. Finally Carl and Bill both shouted at the top of their lungs. She stopped for twenty full seconds, gave us one long look, turned, and as slowly, deliberately and gracefully as she had come toward us, she retraced her steps to the tall grass, and then jumped into the donga where her five companions still waited for her only half concealed. We all gasped audibly with our pent up excitement. "Oh! I'm glad I didn't have to kill that beautiful big cat. But I gave her only two more yards. Then I should have had to shoot," Carl said. We paced it off; she had turned at *exactly thirty paces*.

We took ten minutes to get our breath again, and to realize what had happened. The sheer courage and audacity of this superb, feline huntress preparing to investigate, perhaps if stampeded, to attack a living something, as we and our motor car were to her, twenty times her size! She was, of course, backed by at least five other lions in the donga, who would have been swift and efficient seconds had she decided to attack what may have looked to her like a gigantic rhino, but we were quite certain that, had she been so inclined, she would not have hesitated to install herself as an uninvited passenger in our little touring car. "You have seen one of the biggest things any one can see in Africa," my husband said. The sheer thrill of the moment's experience brought me a conviction past any doubt.

We traveled on, through thorn-scrub and grass, through tall growing hibiscus plants, dead since the passing of the rains, until we reached a veritable network of dongas with deep-cut banks, and holding pools of fetid water throughout the year. With much difficulty we made our crossings, our car often sticking in the process and having to be pushed up the last grade. In one place



the natives had built their hunting blinds of thorn and grass and from them lawlessly killed their game with bows and poisoned arrows. Our eyes were now alert for buffalo and rhino, but we saw only a big troop of baboons—I counted forty in the open, while half a dozen romping youngsters watched us from their perch on a big dead tree stub. One baby, sitting close to his mother's side, was left alone when she decided that a closer investigation of us was necessary. The baby foolishly clung to the tree, instead of to his mother, and too tiny to keep his balance, he fell off into the grass. But he was a nervy little fellow and climbed back after his fall. A little farther and we came to a troop of monkeys scampering about in the big yellow acacias. Our eyes glimpsed them as they figuratively flew from limb to limb, but it was impossible to focus our field glasses on them so swift were their movements. Next we saw big herds of zebra. I counted a hundred in one near-by group, with many more in the background. Distorted by the high light of approaching noon, some looked pure white, others seemed covered with long shaggy fur, others shimmered and shifted as if constantly moving, but they were actually standing stock still gazing at us under the trees.

We next came upon a herd of eland. One big cow eland had followed behind us from where the lioness had stalked us until now she joined this herd which consisted largely of cows and young calves. On our approach they stampeded in a cloud of dust, the calves racing in front and the big cows vaulting five feet into the air like frisking calves and looking for all the world like the picture in our nursery books of the 'cow that jumped over the moon.' These antics are one of the sights of Africa, and one not to be expected from such large antelope. A few days before we had seen a herd of one hundred behave in just the same way, and had got a good film of it. An old bull will weigh about fifteen hundred pounds—as much as a big Holstein bull. He has a deep dewlap, a satiny coat and beautiful, spiral-shaped horns that terminate often in an ivory tipped spike.

The sun was on the meridian. Except for the cries of a flock

of small green parakeets the stillness of noon enveloped everything. "When we find a good tree, we'll stop for lunch," we had agreed. Suddenly, Carl remarked casually, "Do you see that lion over there under the tree?" And as I looked for it, "It's probably a stump and will stay until we get there," he laughed. The whole world was enveloped in heat waves but as I looked at the stump I distinctly saw it turn its head. A little farther on we stopped and looked. It was a lion, sure enough, and a big one. We studied him through our glasses. He was near the donga, the securest refuge any hunted animal could wish. An alarm, a bound or two and he would be permanently safe. Although a lion had been the only thing I had even dreamed of killing, I had felt again that morning, as I had many times before, that I had no desire to kill. Then there seemed no chance that fortune would tempt me to change my mind. Now the most unexpected of all things happened. Exactly as if it had been staged, planned and timed for me the old lion walked deliberately into the open two hundred yards away to a small tree with dense shade. There he stood gazing out on the veldt at a small herd of wildebeest, dozing under small thorn bushes. He had an impressively fine, dark mane.

"He big lion. You take picture Bwana? You shoot?" asked Bill, all tensed with suppressed excitement. "You think he has a good mane, Bill?" Carl asked in deference to Bill. It was Bill's day we both remembered. "Yes, *mazuri* (good). He *kubwa sana* (very big)," jerked out Bill. "Memsahib's lion," said Carl as we crawled forward to a fair shooting range. And so it was ordained. Bill handed me my .275 Hoffman and Carl covered the lion with his .475. "Shoot when you are ready," Carl said very quietly. Conscious of an absolutely new sensation in my fingers I pulled, and the lion bounded back twenty yards, and stood facing us. At my second shot the lion took a nose dive into the veldt, lit on his back with his feet in the air and lay silent. We approached cautiously. "Can you see him breathe through your glasses?" Carl asked, still covering him with his gun. We could not. Bill walked toward the lion with my little gun. "Don't get between me and the lion,"



*Photo. by Carl Akeley.*

BILL, AKELEY'S OLD GUN BOY, KNEW A VALLEY WHERE THERE WERE  
"SIMBA MINGI SANA" (VERY MANY LIONS).





NOT ONE OF THE FOURTEEN LIONS MANIFESTED A SIGN OF ANGER OR FEAR—ONLY WONDER AND CURIOSITY.

*Photo. by Carl Kelsey.*



Carl shouted. The wise hunter knew from experience how easy it is for a 'dead' lion suddenly to come to life. Bill cautiously threw rocks at the lion. No response. And as a final test touched his eyeballs with a long stick. There was not even a reflex. The old lion had surely gone on to another hunting ground.

It seemed unreal to me that the *only two shots I should fire in Africa* would bring such a prize. The first shot in line for the heart had struck directly on the humerus, and shattered it; the second at one hundred and thirty yards, had severed the aorta from the heart.

The lion which measured nine feet six inches from tip to tip and weighed about four hundred and seventy-five pounds was an old warrior. His coat was a dark silvery gray; his mane, silver-gray with a deep full frill of black—the brush on his tail was jet black. His face above his eyes was grayish white. Not only was he one of the largest lions my husband had ever seen, he told me, but never before had he seen such a rugged leonine countenance, so marked with age and battle scars, nor one which possessed such marks of personality. He had evidently been in a battle as recently as that morning; one hind leg was deeply cut; his upper lip was bleeding; both nostrils were freshly scratched, and there were three or four smaller wounds higher up on his face. In a conflict for food or perhaps for the favor of some lady feline, lovely as the one who a few hours before had stalked us, the old monarch had had his punishment.

He was probably ten or twelve years old. Four of his incisors, and one bicuspid were missing. His stomach, although of a capacity sufficient to contain half a zebra, was entirely empty, and now in death contracted to a long pipe-like organ hard as sinew. Further observation of his alimentary tract showed that he had probably not eaten for three days. When we first saw him he was doubtless about to lie up until the heat of the day should have passed, and then make his kill. The skinning of this superb animal revealed the marvelous strength and beauty of his muscles, ending in sinews like tempered steel; the masses of shoulder muscles;

long rope-like chest muscles—those used in striking and rending; strong hooked claws of needle sharpness, that rend the hide of a rhino or break the neck of a zebra.

The revelations of the anatomic structure of the lion made me realize more than I ever had before how the pursuit of taxidermy had opened to my husband another source of joy—his sculpture—and why sometimes he was tempted to desert all else for that alone. And so for more than two hours, Carl and Bill worked in the care of the animal that I might have perhaps the most unusual specimen in all the world, and finally as my husband worked to photograph and get the last detail of measurement and sculptural characteristics, my appreciation of it all knew no bounds as he told me, "You know I am going to mount him as a complete animal, as a natural history specimen for you."

Now the finding of these lions in Bill's country, so apparently unmolested and unafraid was a discovery which Carl wanted by all means to share with Martin Johnson, so that a permanent record of these lions in motion pictures might be made. Accordingly, a second trip to the valley was made the following day, and there not far from my 'Silvery Simba's' last stand, Bill showed them a colony of seventeen lions, fourteen of which were massed in one big family. Of course all we did for the next few days was think, feel, see and hear lions. Certainly the sights we saw almost made us believe that it would only be a matter of time until, as Phil Percival's little boy had said, we could "just go up and pat their big, shaggy heads." All our other lion experiences were fading into oblivion.

Carl took the wheel of Johnson's camera car and by skillful manipulation got him in excellent camera range of the big group where he made hitherto undreamed of records of peaceful lions in their home.

First, four grouped themselves on an ant hill, observing us carefully, and nine more watched us from the other side of the donga through a flimsy screen of grass. Not one manifested a sign

of anger or of fear—only wonder and curiosity. As a reward for posing for us, we gave them a zebra for their supper.

The next day Carl drove Johnson and his camera up to within twenty-five feet of a group of eleven, which in the middle of the afternoon we found lined up in a row, this time on our side of the donga, quietly watching a herd of zebra out on the plains. As we approached, three that were a little hidden by the grass moved nearer and out in plain sight. Those in front and nearest the camera were for the first half hour alert, sitting up on their haunches and letting nothing escape them, consequently Carl not only maneuvered the car with great care, backing it farther away at the psychological moment when the lions showed a little nervousness and might have vanished from the scene, but at the same time kept his elephant gun ready for action. Once the engine went dead and the car had to be cranked. When the beasts quieted down, he drove nearer and nearer, where they could watch and photograph every movement of the lions.

Those farthest away from the camera, and, as it happened, near to where Bill and I waited, were entirely unconcerned. One big old lioness with yearling cubs licked their faces and fondled them playfully. Two grayish white young lions, who each day had kept side by side, played with each other standing on their hind legs and 'strengthening their claws' on a near-by tree. Yawning sleepily they came over to the mother and yearlings and all five rolled about in the grass with paws in the air, displaying a wide expanse of white belly.

An old male with a fair mane, somewhat apart from the rest, took little interest in the others. He would nap for five or ten minutes, would then get up and stretch himself, change his position and lie down to sleep again yawning enormously. At one time seven of the lions were lying flat on their sides apparently sound asleep. Even those nearest the camera became indifferent to what was happening and, finally relaxing their watchfulness, meandered about and dozed or rested.

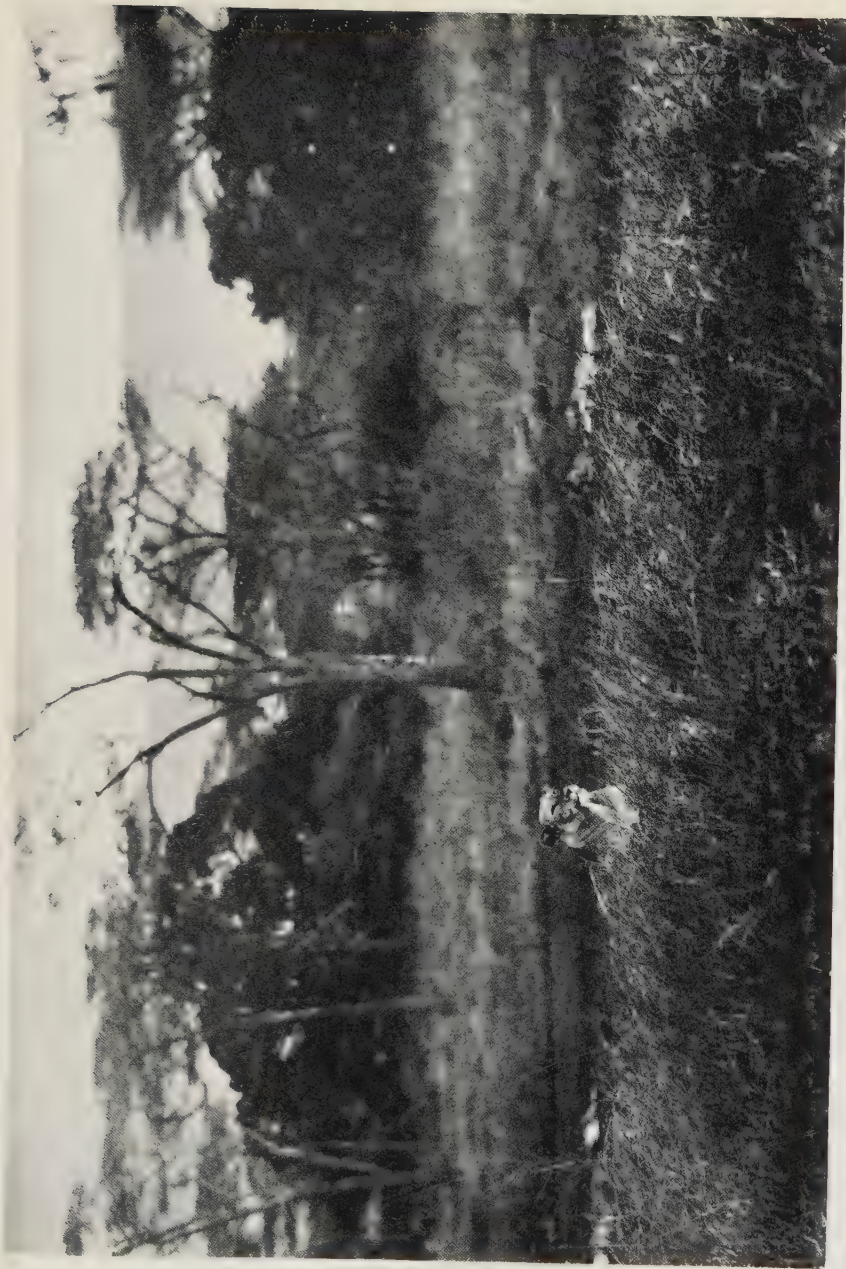
After two hours of 'playing with' these lions, and as the sun was dropping low and a storm was brewing in the west, they manifested signs of hunger, became a little restless and showed great interest in the zebra herd. They now stretched themselves, yawned frequently—a time or two I thought I heard the click of their closing teeth—but they remained aloof and politely ignored our presence. It seemed time to leave, and as we had done the night before, a zebra was killed and brought to them as a reward for their patient posing.

What a day it had been! As we drove home in the thick blackness of the early night, and with a thunder storm breaking in torrents over us, Carl said, "It is the most wonderful lion show I have ever seen." Strangely enough the lion family was not seen again in the valley on this expedition. When looked for they had disappeared as suddenly as they had been discovered. They were doubtless following the departing wildebeest.

This story we had witnessed of lions at peace with the world, is the same story which my husband has told in his taxidermic lion group mounted in the American Museum of Natural History just before leaving for Africa—the story of family life as he had witnessed it in smaller groups of lions on the slopes of Mt. Elgon. Certainly here we all had a remarkable demonstration of my husband's creed that the 'lion is a gentleman'; that if given room he will go his own way without aggression.

Nearly a month of close application to lion photography, however, left little daytime for collecting. To do it meant hunting in the late afternoon, after the lion spearing was finished for that day and caring for the specimens after dark. It was thus by driving himself to incessant exertion, frequently during an eighteen-hour day, that my husband obtained the end he sought. He had added to invaluable natural history records by coöperating in the filming of lions and lion spearing; he had also secured a large double group of plains animals. It contained wildebeest, topi, Coke's hartebeest, Thomson's gazelle, Roberts' gazelle and secre-





THE LIONS NEAR MRS. AKELEY AND BILL WERE UNCONCERNED. SEVEN OF THEM AT  
ONE TIME LAY FLAT ON THEIR SIDES SOUND ASLEEP.

*Photo. by Carl Akeley.*



tary birds. Often I have sat by him until eleven o'clock as he knelt over his task, his deft fingers working in the dim lantern light ever painstakingly but swiftly, in order to save a valuable specimen. Only when the job was perfectly cared for would he stop. Often he could barely stagger off to his six hours in bed when the demands of the succeeding day drove him forth to renewed exertion. Always Raddatz and Bill helped until the work was finished.

The day we reached the Lower N'Gourmetti, Mr. Eastman had shot a large buffalo which had been greatly desired for the buffalo group, and both Carl and Raddatz had worked on its preservation as a specimen. One late afternoon, about the middle of our Tanganyika safari, Carl and I were coming home across the plains after a very unsuccessful attempt at still photography. We had especially sought the massed herd of wildebeest and the graceful impalla—one of the most beautiful of all antelope. But the ranks of wildebeest were thinning as they moved to fresh pastures and the one herd of impalla we had seen had been too quick for us and had swiftly leaped with those unbelievable thirty foot bounds into thick cover. Then, too, a camera shutter had given trouble and the plains had been ashimmer with unusual haze. The day had been made for disappointment, we agreed. Then suddenly two hundred yards away in the red slanting light of a low declining sun, I noted a group of dark colored heads upraised and peering at us over the dry yellow grass.

"Look! Are they hyenas?" I queried.

"Go over there as quickly as you can," said Carl, and, to my surprise, "They are not hyenas—they are *wild dogs*."

I needed no second urging; while Carl got my little gun ready I slid our light car up within shooting range. The dogs held their ground—their stylish heads and sharply pointed ears held erect. Then the game began. In less time than it would take to tell it, Carl got all of the hunting dogs in sight in rapid succession. Then we started to pick them up. Their gaudily marked bodies

spotted with black, yellow, brown and white, were strewn about the veldt. We picked up eight and put their evil smelling carcasses in the back of the car.

"One more dog here, somewhere," said Bill. His eagle eyes had seen it all.

"I fired eight shots," said Carl.

They were both right. After a little we found the *ninth dog*! Carl had killed two with the same bullet. "Nine dogs, eight shots, seven minutes," said Bill, laconically.

The day had not been a failure after all. Unexpectedly Carl had obtained specimens for a greatly desired group. As most frequently they hunt in bands of twos and threes, it was indeed a stroke of luck that he had secured so large a pack. As heavy as a wolf, as beautifully muscled as a lion, these hunting dogs give free vent to their blood-lust by slaughtering the largest antelope in great numbers. To kill this band served a useful as well as a scientific purpose. It was the only occasion in all Africa when any animal my husband had collected had not proved in death a pathetic and almost regretful sight to him.

The long months of overwork had taken a heavy toll of my husband's strength. In the heavy rain, occurring at the end of our second day with the fourteen friendly lions, we had both been soaked. He had been very hot all during the afternoon, and every moment on the alert in a serious game which was still in its experimental stage. He, better than any one else, was aware that a lion should never be taken casually. He had found Lion Valley. He assumed the responsibility, making a success of the undertaking to photograph lions at close range, in the open, in broad daylight and during two entire afternoons—a hitherto unaccomplished feat. As he climbed into our little car to drive home in the pitch dark, he had said: "This afternoon has been like living a year all in one day." It was his *last active day in the field in Africa*.

That night he had a light chill and the following morning ate barely a mouthful. "How I would like to rest to-day," he told me



with a weary, half-apologetic smile. But we started at nine out on the plains where he shot two wildebeest and skinned and skeletonized the animals without help as Raddatz's car broke down on his way out to meet us. That afternoon Carl had high fever.

Leigh had come in from the buffalo camp near Kagio a few days before to work on the backgrounds for the Plains Group and the Wild Dog Group. Carl had located the background for the plains animals—selecting the outlook from high ground two or three miles from camp, showing a wide expanse of plain, interlaced with tree-filled dongas, where the Lumbwa spearmen had hunted, and flanked with blue hills in the far distance. For the Hunting Dog Group, he chose the tree under which he had first seen the animals. Spending a part of each day with Leigh, helpfully suggesting some detail, and watching his beautiful paintings take form was to Carl the keenest delight.

Carl's fever continued. We were three hundred miles from a doctor. For a week I nursed him night and day with the remedies a first aid kit offered. Though physically far too ill to raise his head from the pillow, Carl fought against giving up his mental oversight of the work. He demanded to know the progress of Leigh's painting, the headway Raddatz was making in caring for the impalla specimens Mr. Pomeroy had now begun to collect. Then one day when his fever had subsided a little and when a need for developing powders had arisen in the adjoining camp and while I was temporarily absent from his tent, he left his bed and went into the hot storage tent to rummage for the supplies. When I found him thus engaged, I had a terrible realization of the length to which he would go to further a cause or to be of service to a friend. That day he well-nigh attained his Calvary!

Finally his fever was checked. In conference with our friend Mr. Pomeroy, still camped near-by, it was decided that the only wise course was to take Carl to Nairobi for medical advice and treatment and to go as soon as possible after his fever had subsided. Accordingly, on the third of September, with our faithful boy, Bill, I started for Nairobi with my husband in his bed in a

heavy covered motor lorry, traveling across the rough trails and dongas of the broken Tanganyika veldt.

It seemed a brutal thing to subject my husband to the trials of the journey. It was almost unbearable to him who had toiled under a thousand African suns from Somaliland to the Cape, that he should thus be taken away from his much-loved work of which he was the very part, back to the torment of convalescence in the town. He begged to stay on. "I shall get well more quickly here," he pleaded. But, to us, in our best judgment, it seemed the acme of dangerous risks to keep him in the extreme heat of our sweltering shadeless camp. Furthermore there were bush fires burning on the hills about our almost waterless valley—and both smoke and flames were uncomfortably near. The night before our start, Raddatz and I had watched the on-creeping fires with much concern, and had planned the cutting of a fire brake for protection should the flames sweep the next ridge.

With our hospital lorry and a small baggage lorry driven by a native, we left our camp—Leslie Simson's old camp in the Serengeti—in the afternoon just as the heat of the sun was abating. Thirty miles out, a heavy thunderstorm such as had drenched us on our last day 'of play with the fourteen lions,' broke in fury over us. In ten minutes the track was afloat, our wheels began to slip, and even though we put on chains, our lorry slued about and finally stuck in the black-cotton soil, so quickly transformed to soft, soapy muck for a depth of several inches. Mired down as we were, there was nothing to do but camp for the night.

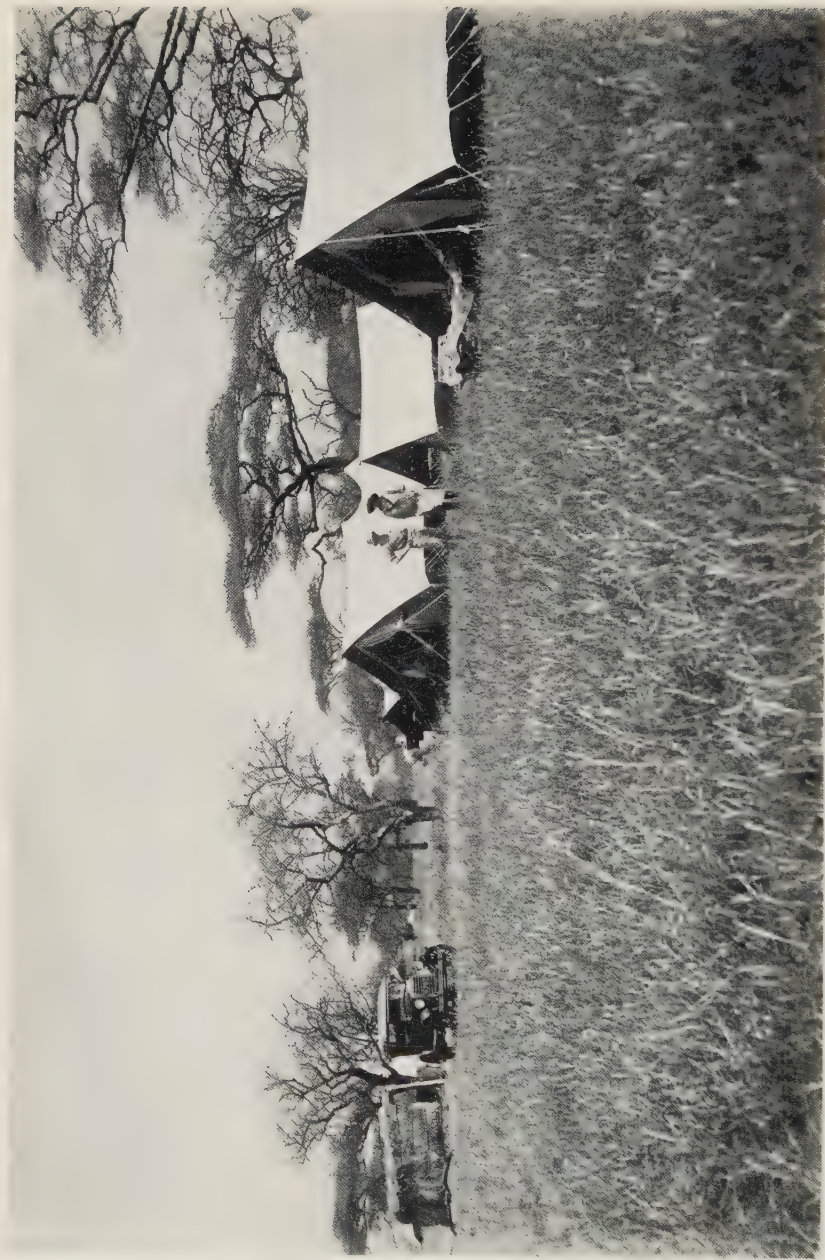
I had brought dry wood for a cook fire, and the motors were supplied with debbies of water. The mud came half way to my boot tops and clung there in masses, and the downpour continued as I unpacked the little cook outfit and the food in our chop boxes. But Carl ate the hot broth and poached egg I prepared for him and seemed more comfortable than I had dared hope. I knew he was fighting with me now for his recovery. Bill pitched my little 7 by 7 tent, opening it on the back of the hospital lorry.



CARL AKELEY'S WORK CAMP IN TANGANYIKA, WHERE OFTEN UNTIL ELEVEN O'CLOCK AT NIGHT HE WORKED TO SAVE VALUABLE SPECIMENS FOR THE PLAINS GROUP.

*Photo. by Carl Akeley.*





*Photo. by Martin Johnson.*

THE AKELEY CAMP IN TANGANYIKA FROM WHICH MR. AKELEY COLLECTED THE  
ANIMALS FOR THREE MUSEUM GROUPS.



Although he knew how much I always craved fresh air, he tied up the other end of my tent saying, "Many big lions here, Memsahib. Maybe some hungry." He put my gun under my cot, and went to the other end of the lorry, stretching out on the floor with the big elephant gun beside him. I did not need any words from Bill to know where his heart and mind were in this extremity.

My husband's temperature continued normal—I thanked God devoutly for that. Several times in the night I went to him. He breathed quietly, and rested. But I doubt if even the natives got much sleep that night. As Bill predicted, the lions were all about us. One deep-throated fellow in a donga, not over one hundred yards away, talked to us at intervals all through the hours. My tent vibrated, as his roars reached their augmented crescendo. He was answered by others a little farther off. Torn and soul-racked as I was with anxiety over my husband's illness, I felt a certain gratitude for this lion carnival. We were all so irreparably a part of the African wasteland we both so dearly loved, and I knew that the lions were making the night less long and wearisome for Carl. The next morning, at daybreak, he lifted himself a little on his pillows to look at a big lioness enthroned on a near-by ant hill, and with the first little smile I had seen on his face for days, he said: "Mary, they gave us a farewell concert last night."

It was just after dawn when we started on. Stopping four times for rest and refreshment, we made camp after dark at Quarantine in the Kidong Valley—a journey of nearly two hundred miles. The following morning, Rockwell, encamped across the valley, saw our motors and came over to us. For three weeks following the middle of August, he had been collecting Chanler's reedbuck and baboon for the klipspringer group. Jansson had been with him painting a background which Carl had promised James Chapin for one of his bird groups. Carl listened to Rockwell's story of his collecting, alert to all details. Thus did his spirit ever dominate.

Though no one could have driven the heavy lorry with more

care and skill and consideration than did John Wilshusen, yet it was a grilling day for my husband and taxed him sorely. But never once did he complain. Soon after noon on the third day, we reached the Nairobi Hospital, where I had wired for a room from the telegraph office at Narok the day before. As Carl very much disliked the idea of going to the hospital, where, on a previous expedition, he had spent many critical and unhappy weeks as a blackwater fever patient, he was greatly relieved when we were told there was no available room for him. The physician in charge suggested the Kenya Nursing Home where, he assured me, my husband would get the best nursing and food obtainable in Nairobi, and with far better facilities for caring for him than our unfurnished Nairobi base afforded. This clean little stone house, set in a garden of flowers and with its capable director and staff of nurses, proved indeed a haven of rest. There we were installed, and there under the care of Dr. G. W. S. Anderson, who said that bringing my husband out of the heat of our Tanganyika camp had been the only sane and logical thing to do, Carl improved steadily. Although his heart had ached at the thought of not seeing the work in Tanganyika through to the state of perfect completion he always demanded of himself, when once he was installed in the Kenya Home he relaxed and rested and forgot the inevitable. With that remarkable ability which he had to put out of his mind forever his past disappointments, he turned his face to the future. Although thoroughly examined for tropical disease, there was no sign of malaria or other germ-produced fevers. Dr. Anderson pronounced his case one of complete exhaustion from long continued strain and overwork, and not caused by pathogenic bacteria. During these six months Carl had worked without cessation. His eagerness to make African Hall a reality before it was too late impelled him constantly to tax his physical resources to the utmost. Often he took up the trail at dawn and the preservation of specimens or the development of his photographs kept him busy far into the night. On a single expedition the museum collector is frequently content to gather

material for one or two taxidermic groups; but now, beside assisting a party of sportsmen in their plans, Carl had undertaken as a minimum to secure in their entirety six important groups for African Hall—a colossal task, even with the aid of expert assistants.

For three weeks my husband rested and grew visibly stronger. He read and I read to him many hours each day. He saw and enjoyed his old friends, Mr. and Mrs. Leslie J. Tarlton, Mr. A. Blayney Percival, Mrs. Philip Percival, and our newer friend, Archdeacon Swann. Their kindness to both of us, I shall long remember.

Shortly after our arrival, Rockwell and Jansson, having completed their work in the Kidong Valley, had returned to our base house in Nairobi. They were soon followed by Leigh and Radatz who had remained in our Tanganyika camp, the former to finish the studies for painted backgrounds of the Plains and Wild Dog Groups, the latter to secure a few needed antelope and care taxidermically for the specimens Mr. Pomeroy was collecting.

Even from his bed and still weak from fever, Carl began to direct the work of his men, that no time be lost in packing specimens for storage and shipment. While there he arranged with Mr. Pomeroy that the koodoo hunt should be made in Eastern Tanganyika near Dodoma and that Rockwell should accompany him and his white hunter, Pat Ayer, to take care of the specimens in the field. He also instructed Leigh to copy one of the expedition paintings for Government House, Kenya Colony, a view from Lukenia Hills across Athi Plains with Mt. Kenya in the distance.

Mr. Eastman, whose elephant hunt had unfortunately been unsuccessful, now returned with Pat Ayer, Mr. Pomeroy's white hunter, who had taken on his safari after Philip Percival was required to go into the field with a new party. To our great regret we now had to say good-by to Mr. Eastman and Dr. Stewart. They sailed for home on September twenty-first. Two days

thereafter, Carl was able to be moved to our house in Parklands, where for the next two weeks he allowed himself only brief time for recuperating. For the most part he engaged in supervising packing and repairs and in preparing for our gorilla expedition to the Kivu, Parc National Albert, Belgian Congo.

Mr. Pomeroy with Ayer and Rockwell were ready for the greater koodoo hunt on October eighth. "You will never know, Dan, how sorry I am not to go on that koodoo hunt with you," Carl had said as we bade Mr. Pomeroy good-by. It was indeed a bitter disappointment to us both. For weeks we had cherished this plan to have a month with our friend and expedition sponsor. His generosity and unselfishness had been outstanding throughout the entire expedition. We both agreed that 'Dan stayed awake at night trying to think of something he could do to add to the happiness of his companions.'

"I want to give him a wonderful hunt," Carl had said. "I want to hunt with him for one of the most splendid animals in all Africa,"—the increasingly rare greater koodoo. But Carl's illness had denied him that privilege. As we three sat on the cool shaded porch of our Nairobi house, drinking each others' health in nourishing eggnogs, I am sure each felt a melancholy sadness at this parting of the ways. And as their cars and motor lorries finally rolled out through the palms and cedars of the shamba and we waved our farewell, Carl and I, hand in hand, stood long in silence, while the red African sunset spread itself abroad, painting the wide eastern plains across which their safari was already traveling on its way toward snow-capped Kilimanjaro.

"What a man!" I breathed.

"He is a *friend*," Carl said, "*the most unselfish man I'll ever know.*"

It was difficult to turn our thoughts to the Congo.



CHAPTER XIII  
ACROSS UGANDA

It was October 14, 1926, that Carl and I finally started for the Kivu Volcanoes of the Parc National Albert. The previous two weeks had been spent in preparation for our safari of three or four months' duration in the Belgian Congo, where for the most part we would be entirely removed from contact with the outside world. To prepare for such an expedition meant strict attention to the countless small details of scientific, photographic and personal equipment and to our food supplies.

The one spot in Africa that appealed to Carl more than any other place in all the world was the Kivu 'Gorilla Land.' Its gorgeous tropic vegetation, its smoking and extinct volcanoes with their cloud-capped or snow-piled summits, its tribes of naked, unspoiled natives, all possessed a charm without compare. But to him the greatest lure of all in this primordial land was its most important citizen, the gorilla, largest of all anthropoid apes.

As early as 1910 he had planned an expedition into German East Africa, as it was then, in an endeavor to get specimens for a group of gorillas to be mounted for the American Museum of Natural History. However, as he has said, "I had to abandon the plan at that time because an elephant caught me unawares and mauled me sufficiently to prevent my carrying out my project."

To him the gorilla made a much more interesting quarry than the elephant, the lion, or any other African game, because comparatively little is known about the gorilla. Not many hunters have shot gorillas and few have studied them in their native habitat. The gorilla is one of the most remarkable and least known large animals in the world, and when to that is added the fact that he is probably the nearest to man of all the members of the animal kingdom, a gorilla expedition possesses an outstanding

significance and tremendous fascination. It was the urge of this unparalleled interest that had crowned his gorilla expedition of 1921 with success. In probably the most hostile and difficult hunting country in the world, and although he had been weakened by fever, he had obtained specimens for his gorilla group, and had taken the first motion pictures ever made of gorillas, wild and free in their jungle home.

By the autumn of 1924, Carl had completed the mounting of the gorilla group, and another expedition to the gorilla country was in prospect. Meanwhile his experiences with the gorillas had served to explode the old theories of the aggressive ferocity of these beasts, and the creation by Belgian Royal Decree of the Parc National Albert with the Gorilla Sanctuary at its heart, to preserve for all time the fauna and flora of this region, had afforded him intense satisfaction, and had increased his desire to make a further and more extensive study of the great anthropoid.

En route to Africa, we had been received at the Royal Palace in Brussels by His Majesty, King Albert, and by Prince Leopold. Both were highly appreciative of my husband's plans for the conservation of the gorilla. They inquired concerning our forthcoming expedition and expressed the desire to know the results of our work on our return. Subsequently, the Belgian Government had formally commissioned my husband to make a general survey of the Parc National Albert, to continue the study of the flora and fauna, especially of the gorilla, and to suggest proper location and plans for the erection of laboratories in a central station of the park. His intense interest in the fulfillment of this mission, as well as his eagerness to provide the correct setting, plant accessories and studies for the painted background for one of the four major groups of the African Hall, made him regard the work in the Belgian Congo as necessary to the completion of the work of his expedition.

In Brussels Carl had suggested to the American Ambassador, Mr. William Phillips, that it would be of value to scientific in-

vestigation both in Belgium and in America if Dr. J. M. Derscheid, research zoölogist, conservationist and cartographer, who was then at work upon a topographical map of the Kivu, should join us as a field assistant in our expedition to the Parc National Albert. The Ambassador cordially endorsed this plan and ultimately secured His Majesty's gracious consent to this union of forces. Derscheid joined us in Nairobi late in September.

The short October rains were just beginning when we started for the Congo, accompanied by Derscheid, Leigh and Raddatz, and a personal staff of ten East African boys. The Kenya roads, rough and worn into deep wheel ruts at their best, were far from easy going for our three heavily laden motor lorries and one small car. A sudden downpour overtook us only five miles west of Nairobi and the mortar-like roads quickly became dangerous and soon impassable. We pulled all our cars over to one side of the muddy road, and in the heavy rain made camp on the edge of soft cultivated fields in the Kikuyu Reserve. As darkness came quickly, we hung up head and tail lights on our motor caravan and, like gypsies by the wayside, we ate a makeshift meal in a makeshift camp, lighted by a smoky lantern, while the rain dripped down our necks. Carl and I spread our mattresses on the waterproof ground cloth of his little 7 by 7 tent and, contrary to what one is supposed to do in Africa, slept on the sodden earth. I cannot recall a night in which we slept more peacefully and completely. But despite mud and discomfort, our joy and relief were great indeed for at last we had started on our long journey to the Congo. We were *off*!

All across Kenya the rough roads continued, but in compensation they led us again down the Eastern Escarpment with its broad view of the Kidong and Longuemont and along the hills rolling back from beautiful Lake Naivasha with its flocks of silvery white egrets whirling to and fro above the turquoise waters of the inland sea. Here at one vantage point, beside a running stream, I stopped my motor and got out. Carl following me in his lorry called to know why I had halted. "I have just stopped to look at

Africa," I told him. A strange coincidence! Standing beside me, he pointed out his old camp site of 1912, not one hundred yards away, from which he had hunted hippo in the lake, and where he too, had paused, 'to look at Africa.'

It was a hard pull to get our laboring motors up the western wall of the escarpment and on to the Uasin Gishu Plateau, with its broad fields of waving wheat decorated with whydah birds, with its far horizons, and with its keen strong winds which even at noonday made topcoats a comfort.

Here the agriculturist is in possession. The great zebra herds, with a bounty on each head, are of the past. We camped across the Sosiani River in sight of Eldoret, the thriving 'city' of the plateau. Within a few rods of us an old Boer farmer noisily lumbered in with ox-team and trekking wagon and outspanned for the night. He promptly came over to our tea table, where, reeking of his cattle, he questioned us in his broken Dutch-English as to our journey, commented upon the changing country and finally related his troubles with the game. Typical of a large population now living on the western slope of the plateau, which had migrated northward from South Africa, he was openly hostile to all game unfit for food. "Deeze zebra only vermin. I made good kill of two hundred myself only. Of bounty money I get some four hundred shillings. We send all hides to Nairobi—many car loads. Zebra to crops very bad fellows. All farmers glad when all zebra shot are. We must raise crops," he repeated over and over again, boisterously pounding the tea table.

We tolerated him because he gave us unvarnished the story of the farmer-settlers' all too common—perhaps inevitable—hatred of wild life.

"I wanted you to hear that Boer talk," Carl said to Derscheid and me, "for now you know why the game is gone in South Africa and from the Uasin Gishu Plateau. When the farmer comes, the game must go."

It was on these same beautiful plains that Carl, in 1910, had spent three weeks in filming lion spearing by the native Nandi;



and now, as we looked across the glorious plateau, he said, "There was no house between here and Sergoi in 1910. Just plains like the vast Tanganyika plains. They teemed not only with zebra, but with lions and antelope in even far greater numbers than in Tanganyika to-day."

Now the Uasin Gishu is tenantless of wild life. The beautiful uplands shimmering in roseate haze and stretching to the high crest of cloud-capped Mt. Elgon remain, but the graceful creatures that once roamed their broad expanse have vanished never to return. It is indeed an unhappy story.

The next day dawned full of sunshine. It was our second wedding anniversary and we were both very light-hearted and happy, —happy for our past joyous months and light-heartedly looking into the future as we spoke of the Kivu and of our African trips to come. In some mysterious way Bill, who often seemed to read our thoughts, knew it was our Big Day, and just after breakfast he headed the whole procession of our native boys who came up to us, shook our hands and wished us happiness. Of course, we gave them their inevitable baksheesh which they took with much laughter and appreciation, for in a few minutes they would go across the river to the town where they would have the fun of buying cigarettes. A native will go cheerfully without food for thirty-six to forty-eight hours if he has a good supply of cigarettes.

All that clear day our road gave us a series of splendid views of Mount Elgon—a never ending source of delight in color and form. Toward evening our enjoyment of the landscape was distracted by a long stretch of bad road leading up to a rickety bridge over a deep river. As the bridge seemed on the verge of collapse, Carl insisted on driving across with me in my light car first and then taking his own lorry over as a test of its strength. The bridge fortunately bore up under our heavy loads.

Beyond the Kenya border we welcomed the Uganda roads with their wide crowned surfaces, metaled by the natives with crushed volcanic rock and kept in excellent repair as tribute to

their kings, who since the earliest days have required well-built avenues of communication, whether for foot, bicycle or motor. It now savored of a real holiday to skim along over the smooth roads, shaded by trees of dense green foliage crowned by heavy masses of henna colored blossoms, up and down the rolling hills and between walls of elephant grass and papyrus.

"This is the country," Carl said, "through which I used to bicycle when hunting elephant. But then I always felt overpowered and oppressed by the interminable wall of grass crowding in upon the narrow track. The roads were just as well-built then, only now they have been widened into motor highways. Never have I enjoyed driving any road as much as this."

Here and there deep streams of green water flow out from dark forests. Tall, massive white-trunked native trees are trellised with gleaming vines ablaze with large scarlet flowers. Elusive monkeys, chattering noisily, scamper from branch to branch. Raucous birds of brilliant plumage dart to and fro brightening the wall of green like shafts of sunlight. It is the African jungle, contracted here to narrow valleys by the onslaught of the dusky hordes demanding wood for fire and dwelling throughout the generations.

Near one of these green jungle oases, and in the only break for miles in the elephant grass, we made our camp adjoining the domain of one of the Uganda native kings. No sooner had we set up our tents than the king, doubtless informed by some invisible watcher, appeared with a long train of followers. He was dressed according to the Mohammedan custom in a handsome embroidered white silk robe and red fez-like cap. As we sat by the chief, who made a long speech of welcome, Bill, ever dignified, quick and resourceful, acted as interpreter. Our conversation, though punctuated with pauses, had none of the naked gaps that sometimes occur in the best regulated drawing rooms. The king was very much pleased to see us. He was glad we had camped so near his shambas. Few safaris stopped to see him nowadays. He lived too near Jinja. The motor car had changed it all. He longed

for the good old days when many travelers came, halted long and there was a chance for an exchange of visits. He wanted news of us, why we were in Africa, what was the object of our quest. Answered at length and to his satisfaction, his gifts now began to flow in. No welcome is complete without gifts: milk and chickens and eggs for Bwana and Memsahib, dry wood for our fires, water from his own spring. He gave generously from all his store. He asked us how many black boys we had and then ordered his neapara to bring for each a bunch of big, luscious ripe bananas. Soon they were piled high in a pyramid near our cook-fire and our boys were exchanging gossip with the Uganda boys. Over all the camp floated that indefinable but palpable hum of happiness and satisfaction—soft spoken words, low laughter, the intoned song, the drifting smoke of crackling cook-fires—the contentment of the African camp at twilight.

Noting that our table was being laid for dinner, the king left us, after exacting our promise to visit him in his house the following morning and after telling us that on our return he would call in all his seven thousand subjects from the two thousand five hundred square miles of his kingdom that we might see and photograph them in their dances and at their work. As Carl had wanted photographs of the Uganda women water carriers and dancers for our friend Bessie Potter Vonnoh, the sculptress, whose work he hoped to see in African Hall, he readily accepted the king's invitation. We promised to camp on his own camp ground on our return and to send a runner out from Jinja a day ahead to prepare him for our coming. Accordingly, on my return across Uganda, I remembered their agreement and stopped again in this friendly retreat, securing the needed photographs.

Carl was so pleased that I should have the opportunity of witnessing this bit of old African ceremonial and hospitality; he was glad that it had not passed into oblivion in Uganda where the native kings have always been noted for their superior minds, government and customs. It was a memorable day and a precious evening. Little did I think that in exactly one month my husband

would have gone on to that Mysterious Beyond, leaving me alone to attempt to carry out his unfinished work.

The next morning the king and his whole retinue, all in clean white silk robes, awaited us at the roadside. He invited us inside a strong palisade of growing trees to see his house with clean-swept white clay floors. It was well built with thick, sun-proof mud walls, deep windows and high roof. Its steep rafters were of heavy bamboo. Its thatch was papyrus and elephant grass, closely laid and strongly interwoven—a fascinating construction.

Thanking the king for his hospitality and promising to visit him on our return, we gave him our parting gift of silver and started on our way. For forty miles our road led through elephant grass, past small clearings in which banana groves flourished, and along vast papyrus swamps beside whose deep-flowing streams tall, beautifully proportioned Uganda women stopped to fill their brown clay water pots or marched in stately procession with their heavy burdens poised gracefully on their heads. Their perfectly modeled arms and chests, their strong, straight shoulders, their well-knit torsos, their faces smiling or wondering, their brilliantly patterned flowing draperies—all formed a picture I delight to remember.

At Limuru on our way through Kenya we had heard of a small-pox plague at Jinja and that no one entering would be allowed to go on west; that in any case it would be necessary for all of us to be vaccinated before leaving the town. Worried by this disquieting news, we ordered all our boys to remain on the loads and they obeyed, foregoing bazaar and duka with a fortitude not witnessed previously or afterwards. Then we reported to the District Commissioner who at first said he saw no way in which the medical officer could make an exception in our case, but when he actually got Carl's name and knew of the seriousness of our mission, he said, "Oh, I am sure we can take your word that none of your boys have left your cars. We know all about you here." And so we were helped forward.

At the ferry we purchased large quantities of the most de-



licious pineapples I have ever tasted. The ferry across the outlet of Victoria Nyanza, the headwaters of the Nile, barely held our little caravan but we reached the other side in time for a very late lunch. We had dimly heard the roar of Ripon Falls a mile or so away, where the great Nyanza debouches into the palisaded Nile, but owing to the complications of the plague, a visit to the falls was postponed until our return trip. In 1921, on his way East from the Congo, Carl had photographed the falls and had been greatly impressed. Now he was anxious that I, too, should have that experience.

Along the broad highways, the old caravan routes from Mombasa to the Nile, the elephant grass grows ten to twenty feet high. Deep ditches drain either side of the road flanked by reddish bronze hedgerows, and big dykes are built across all the papyrus swamps. Alternating with the papyrus swamps are long avenues and vast groves of ancient trees with towering trunks clean and white as the soul of a little child; palms stand side by side with other trees filled with gigantic red blossoms. Trailing morning-glories are everywhere—yellow, blue, purple, lavender, pink and white. The flowers are so profuse that contrary to my usual custom I picked them every morning and decorated the searchlights of my motor with a gay bouquet. Here are acres of creamy white wild clematis in bloom. Much cotton and coffee are grown hereabouts and large rubber plantations have been planted, but even with labor at four cents per day it is too expensive to harvest it, so the large trees are growing up untapped. A tiny pin prick brings the white rubber sap to the surface of the tree and when it dries a little, it has all of the quality of a rubber band.

The roads are built in the main across the ancient lava flow. Sometimes a few inches of soil cover the rock; elsewhere the wheels go over the solid, flat, smooth outcrop for miles.

After a lunch in the shade of an old rubber plantation with dozens of natives grouped around watching us, we hurried on toward Kampala. We had hoped for a camp before reaching the

town but we found the country so filled with native villages and shambas and herds of cattle that we went on through the busy English thoroughfare of the town to an old camp ground located on the hill under the old Cathedral. We thus avoided hotels and the complication of putting all our goods in a storage warehouse, an arrangement which had proved disastrous on my husband's 1921 expedition.

Kampala, with large native quarter and Indian bazaar, was filled with irresistible charm for our black boys. We let them all go, even to the cook, whose 'relatives' had trooped steadily into camp ever since our arrival. I prepared our supper from the chop boxes and in sight and hearing of the busy town on the opposite hill we had a quiet restful meal. Only Bill remained to guard our camp against thieves.

Up and down the road a hundred yards away an endless black procession tramped, and nearly all with the inevitable head load. Women in trailing flowered robes bore steaming rice in woven platters and baskets skillfully patterned in colorful designs—an art brought into Uganda by the wives of the askaris who had come in from the north. Many were bareheaded; others carried bright umbrellas purchased in the Indian bazaar. There were *dhobes* (laundrymen) with heavy bundles of freshly washed and ironed clothing; boys with heavy bags of posho; shamba boys with baskets of fruit—pineapples, oranges, lemons, bunches of bananas, red, green and yellow; worldly wise boys in English khaki swinging English canes; boys in trailing white robes and embroidered caps of Islam; little boys thrumming stringed instruments and dog-trotting in time down the foot-polished path. Laughing, jesting, quarreling, singing—the noisy, never ending stream flowed on into the night.

As we ate, a band of minstrels in ragged bark cloth *dhobis* (loin cloths) gathered on the edge of our camp ground and serenaded us with drum and bandore. I bought a graceful rawhide lute for fifteen shillings. Outside my tent there was a large flock of

brilliant yellow birds that looked like overgrown canaries. Pinkish gray finches, not much larger than a humming bird, with pinkish red tails and others with scarlet bodies and black tails fed near-by.

The next morning we sought information concerning the roads into Kabale and the possibility of securing porters there. The Provincial Commissioner was most kind, giving us letters and helpful advice. He volunteered to wire the District Commissioner at Kabale preparing him for our coming, but at the telegraph office they told us that a band of elephants the day before had walked through the line and communication was temporarily interrupted. A long and busy day was filled out by overhauling and refueling our motors, mending tires, adding somewhat to our supplies, and in provisioning our boys. We prepared for an early start the next day.

We made excellent time on the fine roads to Masaka and Mbarara, but between Mbarara and Kabale we found badly washed roads and broken bridges which we had to repair. Although Carl had by no means recovered his strength after the serious attack of fever he had had in Tanganyika following our experience with the lions, yet he worked unceasingly on all this heavy transport labor, and with great expenditure of energy. He never saved himself. Bill was the only native who took the trip seriously. To the others it was a great 'joy ride.' Often Carl changed a tire while the natives looked on. "It is easier and quicker to do it yourself," was his response to my remonstrance. Certain it is that one must expend a great deal of energy in getting results out of the African native, and it is often 'as easy to do it yourself.'

Once I thought my light car in the lead was going through a bridge. Beneath Carl's following motor lorry the tottering span grumbled and gave way. It meant two hours of jacking, lifting, pulling out the old timbers and putting in new ones, before his car could be dragged out—and all in the hot noonday sun. In all this hard labor, Carl took the lead, doing the work of two men

and never resting an instant until the job was finished. Never once, no matter how ill or fatigued he may have been, have I seen him an onlooker while a white man worked.

One of our worst motor experiences was getting up the long hill east of Kabale. This ascent was accomplished by having several score of local natives push and pull on a cable attached as a tow rope to each lorry and to the small car whose power was used to pull the heavy motors. Each truck had to be pushed and towed in turn, Carl driving the lorry while Raddatz towed with the light car. How we would have accomplished the ascent without these natives I do not know. They congregate in large bands at the foot of the hill, waiting for a chance to aid stranded motors and receive baksheesh as reward. The ordeal was so great for all of us and the tax on Carl's strength so heavy that I have only pain in the memory.

Finally we started down the other side of the hill. A narrow winding road led past fertile, cultivated fields of beans and bananas, past native villages whose dwellings and storehouses were built in conical form and heavily and symmetrically thatched with reeds, then through a beautiful stretch of papyrus with a wide river flowing out to a vague beyond. A tropical thunder storm broke suddenly and relentlessly upon us, and with it came swift darkness, through which at the summit of another long hill we could see the lights of Kabale. Long after dark and with the driving rain still falling we came to the District Commissioner's beautifully planted reserve high on the hilltop.

Directed by a native policeman we pulled our lorries into the shelter of a large bamboo and papyrus *banda* (shelter). Then Carl and I took our light car and, still guided by the askari, went up to the home of Captain Vaughan Jenkins, the Assistant District Commissioner, as Captain Tufnell, the District Commissioner, was away on safari. It was only a moment after Carl went in to report that Captain Jenkins came out with him to invite me to dinner and to say that he would take no excuse. For us who had combated the rigors of the road and the deluging





*Photo, by Mary L. Jobe Akeley.*  
 THE UGANDA WATER CARRIERS HAVE STRONG  
 STRAIGHT SHOULDERS AND  
 WELL-KNIT TORSOS.



*Photo, by Mary L. Jobe Akeley.*  
 ALL BURDENS IN UGANDA ARE BORNE  
 AS HEAD LOADS.



WELL CONSTRUCTED ROADS MAKE TRAVEL EASY IN UGANDA.

*Photo, by Mary L. Jobe Akceley.*

storm here were cheer and relaxation indeed—a blazing fire, an attractive table laid for dinner, and a bewitching baby chimpanzee which Paul Chapman, a white hunter, had brought out of the Congo. While Carl and Captain Jenkins went down to settle the rest of our party in the grass banda, I tried to make myself presentable for dinner.

Carl and Jenkins soon came back laughing.

“Mary, you are more indispensable to this show than you imagine,” Carl said. “As I went back to the motors the men greeted me with ‘Where is Memsahib? Isn’t she coming to tell the *mpishi* (cook) what to cook for dinner?’ ”

This appreciation of my eight months of catering, though somewhat left-handed, at least expressed a basic need.

As I stood by the blazing fire to dry out my rain soaked riding breeches, I thought with amusement of how I had been told that ‘one must always wear evening dress when dining at the District Commissioner’s.’ Now my greatest achievement was clean hands and face and neatly brushed hair, and that as the result of borrowed soap and hair-brush. The four of us, all in khaki, sat down to a delicious dinner enlivened by many a well-told story. And later around the fire we made friends with the sleepy little chimpanzee, Josephine.

Captain Jenkins had insisted that Carl and I occupy the District Commissioners’ guest house that night. Our flashlights revealed at the end of a long avenue of shade trees a commodious whitewashed mud house surrounded by beds of scarlet and yellow poppies. Its spacious lawns of smooth-shaven, velvety grass encrusted with heavy rain drops gleamed white as if covered with hoar frost. Captain Tufnell and Captain Jenkins had spared no pains to beautify the environs of their hilltop home.

As we spread our kapok mattresses on the two little white beds and rolled up in our blankets at the pleasant closing of an unusually long and arduous day, we both felt that we had come to the end of one of the chapters in our African experience.

“This trip across Uganda,” said Carl, “has been a wonderful



thing to me. It has intensified all my old impressions and memories of the country in a short space of time. Even if part of our journey has been hurried, you, Mary, have gotten more out of Africa in these eight months than it would have been possible for any one to get in the old porter safari days under three or four years. Although I hate to take you by motor car where you would so much have enjoyed the porter safari, yet it is now the only way to complete our job. I must admit with all the old hunters in Kenya that the motor safari has come to stay—that is, for as long or *more probably for as short a time* as there will be anything to safari for.”



## CHAPTER XIV

### INTO THE CONGO

KABALE is the end of the motor road. From this point on into the Congo all our transport must be by native porter. Consequently, we spent two busy days in laying up our motors for a three month's absence and in reducing our loads to weights suitable for head transport. We also stored supplies to be used on our expedition into Lake Hannington, Kenya Colony, where accessories and background would still have to be secured after the completion of our Congo work. For the work entailed by these plans no spot could have been more suitable. Kabale is situated on high hills overlooking the outlying, well-watered and cultivated valleys. There is an excellent police force in charge of the District Commissioner's grounds; therefore, one's property is safe from marauders. All natives, whether soldiers or the boys about the town, are comparatively unspoiled and therefore invariably polite and obliging. It is indeed a travesty on the influence of the white man, that one must come to the very outposts of civilization in order to find the uncorrupted native. But it is the old and universal story that in every clime the native borrows the white man's vices and ignores his virtues.

No one could have facilitated our preparations for departure more than did both Captain Tufnell, who had now returned, and Captain Jenkins. When dining with us the second evening after our arrival they volunteered every possible assistance. They provided adequate storage space for motors and supplies, small currency for native wages in exchange for our English pounds, and lastly two hundred porters of magnificent physique who awaited us at dawn on the morning of our departure. The entire post came out to see us off. Even Josephine, the chimpanzee, who with her master had been our dinner guests the night before,

was there in state. She was a most appealing little thing and Chapman did his best to sell her to Carl by relying upon Josephine to 'sell herself' to me. And I do not doubt that, if she had had a stronger spine and a more vigorous body, we would have been tempted to take her home to Professor Robert Yerkes, where she would have had the companionship of his chimpanzee family at Yale University and would thus have been saved the probable fate of the animal store.

It was now my first experience with a large porter safari. Never before had I seen in one group so many naked 'savages.' They sat about on the grass and graveled paths, each with a porter's staff planted firmly beside him, quietly waiting for Bill and Makasudi to give the signal to take up the loads. At their command they tossed the loads up on their heads and ran down the hill towards Lake Bunyoni. We finished the last odds and ends of packing supplies to be left in storage and then drove in the little car the seven miles of half-completed road between Kabale and Lake Bunyoni. Almost all the porters had brought in their loads ahead of us, and there they patiently waited for their twenty cents in Uganda currency—five cents in American money—the tariff for carrying fifty pounds seven miles. When they were paid off, they started back across the hills to Kabale at a dog-trot, apparently not in the least fatigued by their morning's work.

As if by magic, as soon as we had arrived at the lake, a flotilla of beautifully fashioned dugout canoes swept in to the shore. Each canoe was large enough to carry two or three native boatmen, two or three passengers and five or six bundles of dunnage.

Lake Bunyoni is pure beauty. Its blue waters are fringed with tall reeds and starred with pinkish-lavender lotus. Its bays and inlets spread out like a many-fingered hand. Its banks roll back in smooth grassy hills or rise abruptly in bold euphorbia-clad headlands. Green islets inlay its brilliant surface. Native villages cluster above its quiet coves. Native fishermen in small but wide-beamed canoes drift idly across its calmer shallows. Fish jump



*Photo. by Carl Akeley.*

MRS. AKELEY WITH A LITTLE CONGO CHIMPANZEE.



*Photo. by Carl Akeley.*

LAKE BUNYONI IS PURE BEAUTY. A FLOTILLA OF DUGOUT CANOES TRANSPORTS THE TRAVELER ACROSS THE BLUE WATERS.





*Photo. by Carl Akeley.*

NATIVES OF ALL CLASSES—ARISTOCRATIC WATUSI, SERVILE WAHUTU AND BATWA (PYGMIES) FROM THE FOREST HAD ASSEMBLED AT RUTSHURU.



tantalizingly in the wake of their craft. Strong winds sweep across its wider reaches, ruffling the limpid blue into white-flecked billows that chop in little foamy breakers on our shore.

For ambidexterity and speed in handling a canoe I have yet to see the equal of the Bunyoni boatmen. While crossing the lake I was lured by the lovely, fragrant lotus and dipped my hand into the warm water to pluck one. Instantly the native steering the canoe shouted at me in a long outpouring of speech and quickly swung his canoe so that I could not reach the flower. Bill, who was with us, understood the canoeist's protest. Once a passenger had tried to do the same thing, he said, and had tipped the canoe over. He had lost all his dunnage and had with difficulty been rescued. No wonder the native was on guard against a repetition of the foolish act. A little later the canoeists slackened speed and the steersman plucked a lotus for me himself, giving it to me with a little apologetic smile. Its stem measured exactly ten feet in length and it was as tough and strong as a light manila rope.

Although it required a relay to move our camp across the lake, our dunnage was soon placed on the Bufundi camp ground by a crew of stevedore porters waiting at the landing. Canoes and canoeists again vanished into the bays from which they had so suddenly and mysteriously appeared and our little camp was left alone to the first restful afternoon we had known in Africa and to a perfect evening in a sublime spot.

Before dawn I was awakened by a beating of drums—the summoning of our porters from their huts in the outlying hills. Again two hundred naked, superbly powerful men swung our boxes lightly to their heads. At a swift rhythmic pace few white men could maintain they climbed the hills buoyantly and reeled off the miles scarcely bending under their loads. On my husband's 1921 trip from the Kivu over the same trail he had used a bicycle and, in addition, his party had had a chair in which the natives had carried any one too fatigued to walk. He had decided against bicycles as being of little help on the steep trails leading out of Western Uganda. At Kabale he had asked me if I would like a

chair. (We had a canvas hammock for emergency.) "I have never used a chair or hammock on safari," he told me. "I do not wish to be carried unless I am too ill to walk." And so I had agreed with him that we would make the journey on foot. Walking had always been one of my chief delights and I was eager not to be a handicap in Africa. But it was a long fifteen miles, and for the most part up hill, from Bufundi to Behungi, the longest fifteen miles I ever tramped. I envied those bronzed Apollos speeding over the trail.

The second day seemed interminable. Under the sickening sun we tramped up and down densely forested mountains, across sun-baked swamp lands, and along recent hippo spoor and elephant trails that led up through the bamboos to high Behungi. In many places the bamboos were trampled and twisted, or torn out by their roots and scattered along the trail. I was to remember this spot full well on my return from the Kivu.

That evening I helped to pay off the porters—thirty cents in Uganda currency. The two hundred men formed in double line and I was surprised that there was so little jostling and noise. While they waited squatting by their porters' staves or native spears, carried for protection in this more remote country, there was much childish pleasantry. Once paid—a few said, "*Santa sana*" (Thank you very much)—they trotted back the fifteen miles over which they had carried their loads. Thirty cents Uganda currency—eight cents American money—fifty pounds carried fifteen miles and fifteen miles to walk back to their shambas! I have never been quite able to reconcile the recompense received and the service rendered. If only some of our civilized workmen who grumble at their six to sixteen dollars for an eight hour day could have at least a brief experience in portering from Bufundi to Behungi!

Sometimes in the morning a few of our porters would squabble over the lightest loads. Some would pick one of the small copper camera or film boxes and be astonished at the disparity between weight and dimensions. Their disappointed faces were indeed a

study. They would invariably try to change to a lighter load, but their own neapara would make them stick to their original choice. A laugh at the porter's expense, a few sulky frowns, a grunt of remonstrance and then the box was lifted to his head and the chagrined native marched off in quick step with the rest.

Behungi the Beautiful! On top of the world it seemed, approached abruptly from the east and breaking off abruptly into the depths toward the west. Here at sunset we had a wide and glorious view into deep, green valleys and blue lakes—beautiful Mugisha, Tshahafi and Bulera. We looked across a vista of hills under cultivation by the natives and over bamboo forests to the gilded pinnacles of the extinct volcanoes of Sebyinyo, Muhabura, and Mugahinga, standing as outposts on the Uganda-Congo frontier. Again and again throughout the moonless night the lurid beacon fires of active Nyamlagira flared and fell, while the vast silences were broken by the faint and doleful throbbing of the drums. Surely this night was not made for sleep! I stole quietly into the darkness to see, to hear, to feel—Carl, likewise awake and aware, spoke to me from his tent adjoining. Here, indeed, we were in *his* Africa.

How we all longed the next morning for a day in this wonder spot! Almost every moment since leaving Nairobi we had been driving ourselves at full speed. I was very tired and I knew the others were equally weary.

"What a wonderful camp to spend a day in!" I ventured to Carl.

"Yes," he answered, "but you will find each camp more beautiful than the one before and *our days are so few in the Kivu.*"

Beyond Behungi we came to a steep descent—a mile of precipitous stair-step trail. Carl, stopping at the top and looking down, pointed out the tremendous drop to the valley floor. "In 1921," he told me, "I carried my bicycle up these stair steps."

"Why in the world?" I queried.

"In the hottest hours of the day my bicycle boy deserted me and there was no one else to push the bicycle up the hill. When

we return over this trail," he said, "we'll start at daylight. I'll never climb this hill in the heat of noon again." This was mentioned quite casually, one of the host of hardships he had undergone on his gorilla expedition.

At the end of each day's march, when we were about a mile from the rest house which is a public camp maintained by the district, the chief, the sub-chiefs and the neaparas, came out to meet us and escort us to the camp ground. Usually our cook and some of our boys had preceded us and a fire was already going and large bundles of fire wood and brimming water jars had been brought in plenty by the chief's men. Captain Tufnell's messenger had 'done us very well,' and at every camp there were preparations for our coming. On such occasions we invited the native dignitaries to drink tea with us and gave them gifts of cigarettes. Once I admired a big black clay pipe one of the 'little chiefs' was smoking. The Sultani (chief) immediately sent for a duplicate for me, saying it was more nearly perfect. The chief's men brought us milk and eggs as gifts, and chickens and sheep for purchase. In any case we accepted or bought these commodities, rendering fair payment in turn. My cook was usually the go-between and had had his lengthy *shauri* or conclave with the local natives before asking my approval for the purchase. With the chiefs Bill acted as interpreter, performing his function with dignity and enjoyment.

One of the most impressive features of our journey across the Uganda mountains was the speed with which the Uganda chiefs assembled the porters for the day's trip. There was never any waiting. Before our breakfast was ready they began to arrive and they were never too few. They were superb specimens of native manhood. We had no worry or delay in this region about the transport of our outfit.

Throughout Western Uganda the trails, wide and graveled footpaths, are well kept. Captain Tracy Philipps, for several years District Commissioner at Kigezi, inaugurated the planting of trees along these native thoroughfares. Grateful indeed to the





Photo. by Carl Akeley.

LEFT TO RIGHT: THE BELGIAN ASSISTANT ADMINISTRATOR, DR. J. M. DERSCHIED, PERE  
VAN HOEF, MWAMI NDEZI (THE NATIVE KING) AND CHIEFS WITNESS THE DANCES OF  
THE BAIWA.



*Photo. by Mary L. Jobe Akeley.*

FAR FROM THE TOWNS INDIAN DUKAS (SHOPS) SUPPLY PETROL AND PORTERS' RATIONS TO MOTOR SAFARIS.



*Photo. by Mary L. Jobe Akeley.*

EUPHORBIA TREES FLANK THE SHORES OF BEAUTIFUL LAKE BUNYONI.

weary traveler are these shaded footpaths. It is a procedure which might well be imitated elsewhere in Africa.

The Western Uganda camp grounds afford much comfort. They are located near water at the end of a long day's march. The grounds are well grassed and enclosed in a palisade of native trees. The rest houses with their thick sun-proof walls and high roofs thatched with bamboo, elephant grass, and papyrus afford a grateful shade after a long march and ample storage space even for a large expedition. To be sure we avoided using these rest houses as sleeping quarters, preferring our canvas tents both because we were accustomed to them and also because a rest house may easily harbor ticks and 'jiggers.' The camp grounds have sheltered quarters for the personal staff of the safari and always a good hut for the cook's kitchen. Stretching back from the camp grounds were large shambas of bananas, always a welcome and palatable food for white man and native alike. On the rolling uplands the native cattle grazed. It is indeed a plenteous land, naturally endowed, improved by the black man's hand. But back of it stands the British colonial system of encouraging industry among the natives to render them self-sustaining and to avoid famine in the years of drought.

When we crossed into the Kivu we entered the most primitive of all the districts of the Belgian Congo. It is still in the infancy of its development. Though enjoying the richest of nature's gifts of climate and of soil, it seemed like another world. The wide tree-shaded roads of Uganda gave place to grass-grown tracks; the productive Uganda shambas were supplanted by wild looking, uncultivated fields of beans, growing in rich profusion; the grass huts were only half the size of those of their eastern neighbors and they were sprouting in grass and covered with trailing vines of squash. It betokened, however, a fertility unsurpassed elsewhere in Africa. It awaits only the directing energies of the white man to make of it a garden spot.

In the early morning we paused near the Uganda-Congo border to make a panorama of the beautiful scene spread out before us—



plain and river and volcano, with smoke clouds drifting across the blue western sky.

Carl always traveled quickly. He constantly outdistanced me. I wondered at his speed, as I was feeling rather severely the unusual exertion of a long day's march in the sun. Knowing how undesirable it is on a long tramp to have any one act as pace setter either to hold back or to speed up, I suggested that he go on at his own pace and I would come at mine, keeping with me old Thomasi who carried my water bottle. So for a day or two Carl and Raddatz were usually ahead of me. "There is only one way to get through," he said once when I caught up with them where they were resting. "I just put my head down and go."

The day we reached the Congo Border I was aware that my husband was using all his reserve energy. In many places our trails were muddy and very slippery from the recent rains and for the most part they were a succession of steep ascents and descents. Towards noon the heat and humidity became almost unbearable. As I panted up one of these steep hills, I came upon Carl and Raddatz. Carl had suddenly become faint and was obviously feeling too ill to go further. He was half-lying in the trail. He sat up as I approached and Raddatz told me later that he had said that he felt very 'strange and dizzy' and that he would 'have to think what was best to do.' Raddatz and Bill went on to overhaul the porters and send back the hammock that he might be carried. I succeeded in helping Carl into the shade of some trees a little farther on where we waited Bill's return. He revived a little after resting for a while. Finally, the hammock arrived and we started on. In about an hour a thunder storm broke over us. We were in a most impossible place on a narrow ledge-like trail, but our boys set up the little tent and for half an hour we took to cover. Then the rain stopped and as we were far from wood and water, we decided to go on. In about three more miles we came to open country bordering native shambas and here Bill and I, with two or three boys, made Carl a little camp and put him to bed. The rest of the safari had gone on to Rutshuru. Fortunately, Bill had



recovered sufficient food and our beds from the rear ranks of the porters. No sooner had we put up a little tent for Carl and had strung a fly outside it for me, when the deluge began again. Carl said he felt much better and soon he was sleeping soundly. With that reassurance, I fell into my cot within earshot outside his tent.

The thunder and lightning roared and crackled about us until midnight and the rain washed under my tent fly, yet it proved a night of peaceful rest for two weary travelers. The next morning Carl felt much better. He ate a good breakfast and insisted upon walking the three miles down to Rutshuru, the government post in the Eastern Kivu.

At Rutshuru the new Catholic Church was being dedicated and as all the natives were enjoying the celebration, we remained there until November sixth, when we could secure the necessary porters. A large and comfortable house, previously occupied as Administration headquarters before the District Government had been removed from Rutshuru to Bukavu, (Costermansville) was most generously placed at our disposal by the Administrateur, M. du Buisson. Carl and I, always eager to be under the sky rather than under a roof, pitched our green tents on the wide gravel walk that bordered the grassy garden and used the house and its commodious porches for receiving our guests, for dining and repacking, and for storage.

The day of the church dedication was full of interest. Natives of all classes—the tall aristocratic Watusi, the smaller servile Wahutu, and the naked Batwa (pygmies) from the forest—had assembled in crowds from the outlying districts. Long ago the Watusi, coming down from the north with their fine herds of long-horned cattle, had subjugated the Wahutu, who had dwelt in this country before the Watusi invasion. After the dedication ceremonies—and we were all invited with the Administrateur and his assistants to sit in the chancel—hundreds of native communicants received the sacrament. Immediately following the church ceremonial, the Watusi danced upon the green. To witness either character dances such as the 'bow and arrow combat' or

group dances, not at all unlike the Russian folk dances, was indeed impressive. These were succeeded by the more interesting dances of the pygmies. On the one side were the white officials, the White Fathers from the Rugari Mission, and ourselves. Next was the native king, Mwami 'Ndezi, dressed in spotless white with gold epaulettes and gold braid, a youthful, intelligent and impressive native sovereign over seventy-five thousand black subjects. On the other side was a background of several hundred coal black natives, their naked bodies well-oiled and glistening in the brilliant sun. They ranged from the pygmies in the front to the taller Watusi in the rear who, row after row, carried aloft their glittering spears. Feet, hands, bodies, every drop of blood in their quickened veins, danced to the throbbing tom-toms.

My husband was asked to photograph both the church dedication and the dances, and so his morning was full and our record of the day complete. At the conclusion of the native dances Monsieur and Madame du Buisson were hosts to the White Friars and White Sisters, to ourselves and to all the white population of the surrounding region. There were eighteen of us in all. Belgium, France, Holland, England and the United States were represented. Our luncheon lasted from twelve until four and everybody was toasted and made reply. My husband gave an account of the object of our expedition which Derscheid reinforced in the language of his countymen. An Englishman of the party told the Belgians, "How happy you should be in living in the last really wild bit of Africa. I have left Kenya and Uganda because they are too civilized. To-day Kenya is too much like suburban London."

To our kitchen that evening the natives trooped with supplies. The Belgian franc is now worth only three cents in United States currency. We paid one franc for a chicken, one franc for four quarts of deliciously tender green beans, one half franc for two quarts of small red tomatoes, fifty francs for a live sheep. As everywhere else in Africa our living had been as expensive as in America, this was a change indeed.

Our day had been filled to the brim. As the late afternoon

shadows lengthened, Carl and I sat in our long canvas chairs on the edge of the porch. Six magnificent Kavirondo cranes, tamed since they were fledglings, walked majestically across the lawn in front of us, turning their golden crested heads inquiringly from side to side. Savage looking native boys wandered up and down beside our house, strumming strange-looking stringed instruments wrought in primitive design and warbling in monotonous but tuneful voices. Saucy-looking native girls, dressed as gaudily as Congo fashions admit, haunted the flower gardens near our headquarters intent upon attracting the attention of our boys. They did it. Sheet lightning played across the western horizon, the aftermath of a recent sudden cooling shower. Here we were at last on the borderland of the most interesting, because the most nearly untouched, part of Africa, undeveloped, remote, potential—Africa as all Kenya and Uganda had been twenty years ago.

## IN THE LAND OF HIS DREAMS

FOUR crowded days passed quickly in Rutshuru. We had to obtain Congo currency, secure our entrance permits, pay taxes on our possessions. In all of these details Derscheid was of the greatest assistance. Then we had to reshape our loads for the Kivu porters. These natives are not stalwart and upstanding like the Uganda porters. Many were lame and in bad physical condition. They carry only thirty or forty pounds at the most, but eager as we were to get up to the Kivu volcanoes of the Parc National Albert, Carl expressed our feelings accurately when he said, "Anything in the shape of a porter looks good to me." It was exactly eight months since we had begun work in Africa, and our journey to the Gorilla Sanctuary had long been dreamed of as the culmination of our wonderful year there together.

As native servants always do when they reach a settlement, most of our East African boys 'had gone wild'; they had drunk large quantities of banana beer; they had visited the attractive Kivu native belles; they had spent all the pay they could extract from me. Having perhaps an unwarranted conscience about them and wishing that they might have a large percentage of their wages when I should finally sign them off, I had lectured them about spending, had cut them down to a small allowance and accordingly had become unpopular. As we literally had to stand behind our boys and drive them into the execution of their tasks—all but Bill and Enoka, the cook, who never failed us—we were glad indeed when on the morning of the sixth of November a straggling line of porters drifted into our camp where their loads awaited them.

Travel was easy enough as we went down the grassy trails from Rutshuru lined with shambas of bananas and beans, across the



deep, swollen Rutshuru River, its palm-fringed banks harboring the crocodile and the hippo, and across the broken country to Busingisi. There we camped by a fine spring, surrounded not only by native cultivation but also by a white man's fields of coffee and of pineapples. Beyond this camp a beautiful panorama of high volcano, of hill, and of rolling volcanic plain spread out before us. But the country was quite destitute of game; in fact, on the whole journey from Rutshuru to the foot of the volcanoes we saw only one wild animal—a little red duiker.

In the early forenoon, we reached the Rugari (Lulenga) Mission of the White Fathers, nine hundred feet above Rutshuru. There we stopped our safari to pay our respects and, if possible, to arrange for the purchase of the staple Kivu posho, beans, for our native porters. We were welcomed by the Fathers and entertained at luncheon. After Carl and Raddatz had spent several hours in repairing the Fathers' motorcycle, and Derscheid had completed arrangements for food supplies, we left in a cold drizzle so heavy that we had to put on our raincoats. Ten days of hot sunshine had suddenly been replaced by this cold fog bank drifting down from the volcanoes, the beginning of weeks of foul weather. The rain continued intermittently until at twilight we reached camp four miles away, near the native village of Burunga.

Carl had ordered the boys to stop on the summit of a small hill overlooking the valley and well above the rest house. He wished to camp where in 1921 he had met the old chief Burunga, who had given him his gorilla guides and porters to take him up to the volcanoes. But Burunga had been banished from the section for the commission of petty crimes and our safari had not gone on to his old shamba but had stopped at the rest house on the main trail from Rutshuru to Kisenyi. Carl was greatly disappointed as he had counted on getting back to the spot where in 1921 'his luck had turned,' where he had gotten his first effective native assistants in his gorilla hunt and where there is a beautiful outlook. Here our tents were pitched on a broken lava

camp ground surrounded by thick undergrowth and with noisy lions near-by who had recently killed twelve of the Fathers' cattle in lieu of their natural food, the antelope, now almost extinct in this region.

The night at the camp at Burunga is one I shall not soon forget. I had been thoroughly chilled at the Mission as I sat on the porch waiting for the motorcycle to be mended and then had felt extremely hot while walking into camp. After giving a few orders to Enoka I turned into bed as soon as possible and in less time than it takes to tell it I was 'a bit out of my head.' Everywhere tin pans were clattering. The cook was making an abominable noise. The boys were contributing their *kelele* over their cook-fires. Finally after Carl and the others had finished their dinner I heard him in his tent and I was sure he was rattling pans, too.

"Oh," I called, "will you come in a minute? Why are you washing dishes?" I queried when he came to my cot.

"I'm just changing my camera plates," Carl replied, and, when I fretted that his day was never done, he added, "I think you are feverish." Then, as he felt my forehead, he said soothingly, "I'm very sure of it. I'll bring you quinine and you'll be all right tomorrow." I gulped it down with smoky, boiled water and felt rather disconsolate throughout the wakeful night.

But we were on the move the next morning, climbing up through the wet clinging earth of bean patches and along the slippery trail. A light rain in this region makes the trails extremely difficult, while a heavy downpour renders them well-nigh impassable. The whole safari climbed steadily ahead of us. Having merely tasted breakfast, I was extremely weak. Although we were traveling at a snail's pace, my clothing was drenched with perspiration. Carl waited a little above me. How wretched of me to be holding up the show!

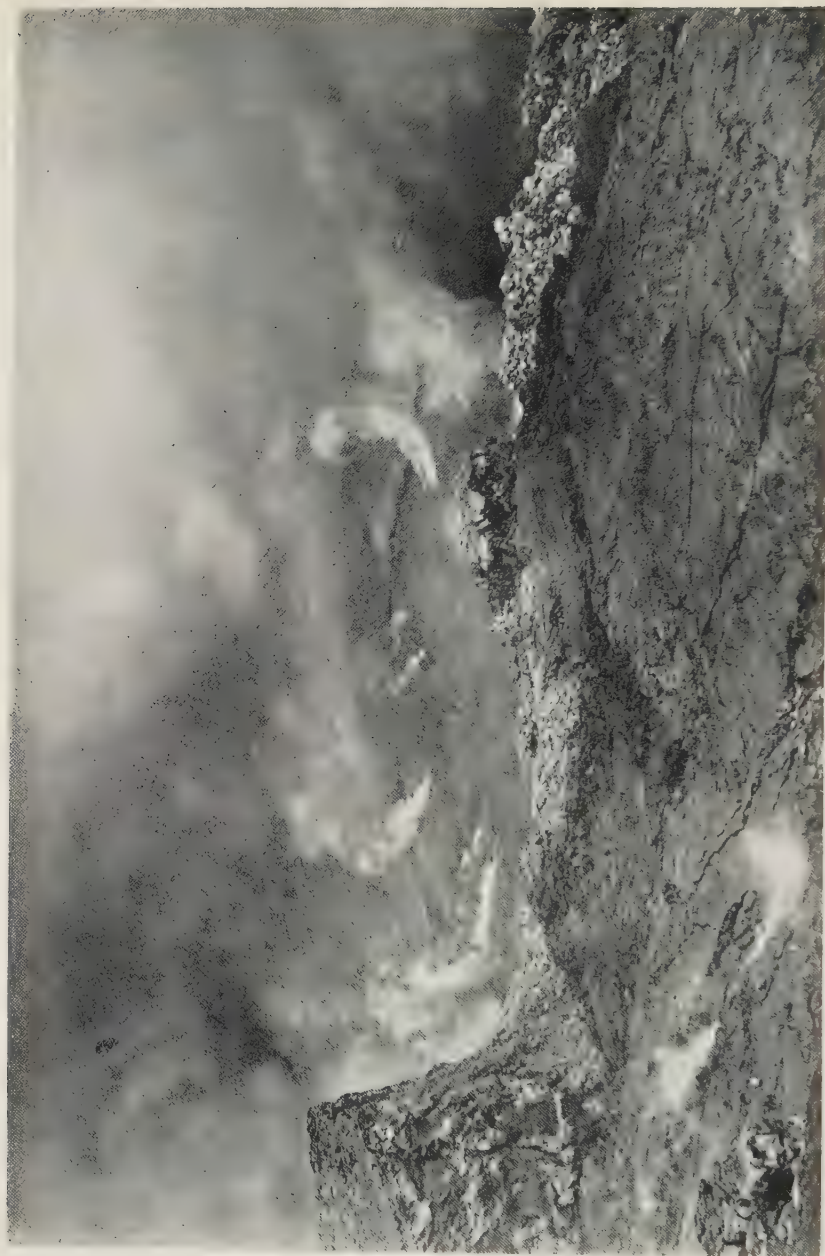
"I don't know whether to laugh or cry," I said as I sank down on the little mound beside him. "But I think I will laugh," I went on, realizing that I could not buckle up at such a time. I



MT. KARISIMBI IN FRESH SNOW—VIEW FROM CARL AKELEY'S LAST CAMP.

*Photo. by Mary L. Jobe Akeley.*





*Photo. by Carl Akeley.*

THE ACTIVE VOLCANO NYAMLAGIRA WHOSE BOILING-POT CARL AKELEY PHOTOGRAPHED  
AT CLOSE RANGE IN 1921.



urged him not to hold back for me, to let me bring up the rear with my boy—but he would not leave me. We were on the hills below the forest, above the cultivated shambas of the natives—hills with small clumps of trees and bush and with here and there, in startling contrast, an isolated leafless tree with masses of scarlet blossoms casting crazy, patchwork shadows on the grass. Below, Lake Kivu with dark-fringed shore and blue shimmering waters was coming into view. What a different world the Kivu is from any other part of Africa! To see its hidden beauties was reason enough for struggling on.

A mile above and our trail lay through a morass plowed deep by hoofs of many native cattle. There was no way around—nothing to do but flounder through the black mire, the wonder being that we were ever able to extricate ourselves from the viscous mass. Then at the edge of the forest, we reached a wide swamp. One side of it was a large pond of deep water with a flock of ducks swimming and diving in it. Among the reeds along the shallow edge our porters were struggling up to their knees in mud and water. It was a sorry sight. We rested here until the last of the poor fellows had crossed; then we followed. Our muddy boots and breeches were now completely soaked for the rest of the day.

We found the trail in the forest steep indeed. It was so deep in soapy, sticky mud that progress became increasingly difficult. The sight of the naked porters crouching down to rest all along the way troubled us greatly. Although we had started behind them and were traveling very slowly, we frequently overtook a group of them huddled over tiny fires built under overhanging trees out of the rain. Poor creatures! How we pitied them! It was only the 'urge' that brought us here! No *man* could have driven us up that slippery rain-swept trail, along the 'hogback' of the lower slope of Mt. Mikeno.

And yet in the face of this cold wet day and discouraging trail, as we frequently stopped to rest, we never failed to remark the beauty of the scene. Our guides had cut our trail through

the bamboos, which were so dense and so high that on this sunless day, the forest was enveloped in twilight. Here were fresh elephant trails made only a few hours before, crossing old ones furrowed out a year ago. Here an old tusker had barked off and corrugated the trunk of a tall tree and had hacked and chipped the heavy buttressed roots at its base as if by a gigantic axe, and had broken off and trampled a half dozen smaller trees near-by. Here doubtless disturbed by our safari, a herd of buffalo had charged down the mountain side through the bamboos, plowing up the wet humus and leaving behind them that unmistakable barnyard scent.

As we sat and noted the spoor of big game all about us, I said, "If that old elephant should start to investigate us, we might have to step lively."

"I'm only thinking of the bufs," said Carl. "They have passed here not more than fifteen minutes ago. They may not be more than five rods away."

But finally as the greatest thrill of all, we soon came upon clumps of bamboos, twisted and torn and pulled up by the roots, the succulent pinkish-grayish-green shoots eaten and the tough canes discarded, where a band of gorillas had taken their morning meal.

"Oh, we have reached your fairyland at last!" I said to my husband, as we rested on a little knoll carpeted with pink begonia-like flowers and white fuchsias and brilliant with yellow hibiscus and lovely orchids.

"You have only a glimpse of it here, Mary," he said, "we must go on higher up to see it at its best."

And on we climbed along the 'hogback' between two deep gulleys, with a sheer drop of a thousand feet in many places, until at last we reached a deep canyon down which dashed a sprightly stream spilling itself in a high waterfall into an abrupt chasm below. Beyond and between columns of beautiful trees, rose the cloud-capped summit of Nyamlagira. It was the only day on our trip on foot into the Congo that Carl and I had traveled alone

without even a black boy near us. It was a day in which we shared completely and without interruption the unmarred beauties of his Africa, surrounded though they were by the hardships of the trail. And for both of us, as we struggled up the last grade and came into the Rweru camp on a little water course a few rods from his gorilla camp of 1921, our hearts beat with fullness of joy.

The Rweru camp site, unused for seven or eight months, was indeed a wilderness. Its dense undergrowth, eight to ten feet high, was trampled here and there by another herd of buffalo which had stampeded at our approach. They had been feeding there and the ground was well littered with their droppings. This camp site is like a small, almost treeless island in the great Mikenokarisimbi forest. Magnificent trees surround it, many of whose massive trunks and sheltering branches are draped in gray-beard moss and decorated with fluttering ferns. Everywhere is a close tangle of vegetation. Each plant is eternally struggling upwards to the sun. It was by no means an easy place to make a camp. Enshrouding clouds made it difficult to see fifty yards away. A few sodden bamboo and grass huts stood about in straggling disorder. One of these the cook used for his kitchen, but it was cooking under trying conditions, as the wood was very wet. We sent one hundred and twenty-five of our Congo porters back to Rutshuru after paying them three francs for three days portering, thus relieving us of the very serious problem of supplying them with posho.

"You put up a brave fight on that steep, muddy trail," my husband said to me as he bade me good night in my tent that night. I knew later that it had been in no way comparable to his own.

That night our camp seemed translated to another world. Heavy clouds made it impossible to see more than a few feet ahead. The voices of the naked porters, crouching over tiny bamboo fires in improvised shelters under the overhanging trees, and of our own boys in their tents near-by echoed and reëchoed

as if amplified by the fog which enveloped us. Invisible jungle fowl, disturbed in their roosting places, squawked incessantly as the darkness fell. In pleasing contrast came the faint night songs of many sweet-voiced birds gathered in the trees about us. It was all too strange for sleep. Throughout the night there was much hallooing as thirty porters, arriving in straggling groups of three or four with loads of beans and potatoes from the Mission, tried to locate us in the ever thickening blackness. Occasionally a buffalo, curious as to who had appropriated his feeding ground, saluted us with his snort. But the weirdest sounds of all were the cries of the tree hyrax, indescribable, like nothing else I have ever heard. At midnight some one went out of his tent with a lantern. It evidently startled the tree hyrax for they set up a most appalling racket in which frogs and crickets joined until the whole world seemed quavering with the noise. With the extinguishing of the light the sounds receded like a wave and finally were lost in the forest.

It is amazing that at our elevation of more than nine thousand feet we should have found 'peeper frogs' singing away as if in one of our little ponds at springtime. But this Africa is a great collection of the unexpected and the unfamiliar, and you cannot go by any rule you have ever learned before in a northern clime.

In the morning we awoke to the patter of heavy rain on our tents, but in the afternoon the sun came through for a little and showed us for the first time the world around us. We were just above the bamboos, plunged in head-high vegetation and in the edge of the forest of giant trees hung with heavy mosses. As the sun shone on these festooned trees they looked as if they were already decorated for Christmas, but actually we had climbed up into the temperate zone and were in October weather of our Northland. The lifting clouds in the late afternoon gave us a fleeting glimpse of pinnacled Mikenó and the rounded dome of Karisimbi covered with fresh snow, while the silver sheet of Lake Kivu, 4359 feet below us, blended into the western sky, the



islands appearing like black, unchanging clouds. Never before, when at an elevation, have I had such a strange optical illusion. Often have sky and clouds appeared like an island-dotted sea, but not until now had earth so merged into sky.

Eager to make the most of this flare of sunshine, Derscheid began his topographical observations and Carl took Bill and the large camera down the muddy trail to the rim of the canyon. Bill soon came back with a note from Carl asking if I would like to come to him. I found him with his camera set up waiting for Nyamlagira to clear. It is the volcano whose boiling pot he had photographed in motion pictures at close range in 1921. But it was all in vain. We waited for two hours but the clouds continued to drift across the summit of the volcano. That night we saw its glowing summit plainly—a great rose-colored cloud, which in the morning turned to amber.

For three days after we reached Rweru it continued to rain. Nearly all of Carl's old Congo boys of 1921, hearing that he had returned to the country, now joined us. With them came Mguru, who had been his guide and gunbearer when he collected his gorillas. It was delightful to see how they reported to us, waiting for no message but taking it for granted that their old master would need and want them. Further events proved that their loyalty and their interest in him far outweighed any pecuniary reward. The guides used the time to cut a trail through the dense undergrowth up to my husband's old camp on the saddle between Mikeno and Karisimbi while Mguru began the manufacture of charcoal which we would need to burn in our little stoves at the higher altitude.

The second day after we reached Rweru Carl awoke with nausea and fever. He said he felt exactly as he had in 1921 while hunting gorillas. At that time, in spite of his illness, his eagerness to find the animals he had come so far to see and his satisfaction and excitement when he actually secured his specimens and motion pictures carried him through the hardest days he had ever known in the field. He afterwards confessed to me that,

then, he had been so weakened by fever and so exhausted by caring for skins and skeletons unaided that he had seriously doubted when it was all over if he could ever get back to camp. At night, half-delirious, he had imagined that his successful hunt was an hallucination, and it was only after he had arisen to develop a sample of his film and to look at the gorilla skins and skeletons that he had finally fallen asleep, content not to wake again and feeling that he might never do so.

During our second day at Rweru he felt better. He spent a long afternoon in my tent, telling me all that the expedition had meant to him. He was able to eat his dinner and to sit with us around our little camp fire. But the next day, after another night of fever and nausea, he felt very weak and remained quietly in bed, reading and sleeping. I recall that he was reading an appreciation of O. Henry written by Arthur W. Page, his life-long friend, whose 'opinion he preferred to that of all the world besides.'

Now Raddatz, in charge of the porters, had moved the bulk of our provisions up to the high camp site called by the natives Kabara and there had begun the clearing of ground for our tents. And on the thirteenth Derscheid, anxious to begin his observations at a high altitude, had joined him.

It was now, in my anxiety for my husband's welfare, that Bill began to be invaluable to me. With a speaking knowledge of half a dozen native languages he quickly assumed authority over our strange Kivu porters. Not only was he devoted himself to my husband and to me throughout our whole expedition—I am sure he would have laid down his life to save either of us from harm—but in matters of dealing with the natives his judgment and authority proved invaluable.

The following morning Carl felt better and after a light breakfast decided to start to the saddle camp. He said he would walk across the gorge, too steep for the boys to carry him down and up, but he promised me that he would not attempt to walk

further. As he walked quickly out of our camp he said, "It is a wonderful thing to be here, surrounded only by loving care." Across the canyon he got in the hammock and I walked behind him. We often remarked about the beautiful forest. Soon the wild celery near us crashed and we heard a deep guttural voice. "There is your first gorilla," he told me. The waving bushes showed me where he had vanished.

Once Carl made the boys stop to show me the beautiful tiny nest of a sunbird hanging from a branch of laurel tree and interwoven in a wide banner of gray-beard moss. Again when we came to the giant trees whose heavy limbs were covered with wide platforms of green moss and hung with waving streamers of fern, he said:

"Mary, do you see now where the fairies dance?"

Finally, when we got into the deepest, most beautiful forest, he said, "Here I am actually on my old trail."

Then he pointed out the slope on which he had killed his first gorilla, so steep as to seem almost perpendicular. It was here he had tied himself and the gorilla to a tree on the brink of a canyon while skinning and skeletonizing the animal. I had seen wild country before but nothing so difficult of access as this. My memory of the alder thickets and devil's clubs of British Columbia recalled nothing so formidable.

Presently Carl said he felt cold and would walk. It was now dismal and dark in the forest, as a chill wind was driving the clouds down upon us from Mikenno. He walked the last two miles into camp. A cold rain fell during the entire trip.

At camp, Derscheid and Raddatz awaited us. We all sat down under the fly of the work tent which looked out on Karisimbi. Knowing how exhausted Carl was, Raddatz and I urged him to go into a tent which was warmed by a charcoal stove. But Carl said, "No, I want to sit outside." He ordered the boys to bring a stove, over which we warmed ourselves and then we had hot soup and biscuits. He talked energetically to Derscheid and me

about how and where he had found the gorillas in 1921 and when the question of locating our tents came up he walked down into the forest and picked out a site protected from the wind.

"I want you to be far away from the camp noise so you can get your rest," he said to me. Then, "As soon as they can put your tent up, we'll go down and sit by your stove."

This we did but the fire was too small to warm the tent and the day grew increasingly cold and stormy. Soon he began to shake with a chill and as his tent was set adjoining mine, I put him to bed and rubbed his cold hands and feet. Two hot water bottles gradually warmed him. Then came the inevitable fever. A little after dark his temperature was normal and he said he thought he could sleep.

As we said 'good night' and I prepared to go to my own tent only three feet away, placing a burning lantern outside his tent, he said, "Be sure to keep your own lantern burning outside your tent all night." Raddatz had told us of the fresh buffalo tracks leading into the adjoining swamp and of hearing leopards near-by.

I did not undress but went to him frequently in the night. He rested but did not sleep. The next morning he was again nauseated. That day I kept Carl warm in his tent but he could take little nourishment. Every one in camp was busy. Raddatz sorted supplies and Leigh and Derscheid with Mguru went out to hunt for the site on which the old male of Karisimbi had been killed and which Carl had decided was the point from which the study for the background of the gorilla group was to be painted. In the afternoon a heavy hailstorm broke over us covering the ground to a depth of several inches.

For the next two days and nights Raddatz and I remained constantly with Carl. Bill was always with us, only leaving for a few brief minutes to eat his food. On the seventeenth of November the unexpected end came. A half hour before he and I had talked a little together and he had told me that he was resting quietly and had no pain. His spirit remained transcendent. I had no warning.





*Photo. by Carl Akeley.*

THE RWERU CAMP SITE—THE LAST PHOTOGRAPH CARL AKELEY MADE IN AFRICA.



*Photo. by Mary L. Jobe Akeley.*

CARL AKELEY'S LAST CAMP, ON THE SADDLE BETWEEN MIKENO AND KARISIMBI.



"HERE IS WHERE THE FAIRIES DANCE." THE GROUND IS COVERED WITH WILD CELERY,  
WHICH REACHES A HEIGHT OF SIX OR EIGHT FEET.

*Photo. by Mary L. Jobe Akeley.*



To even the casual stranger who never knew Carl Akeley, to those who knew and loved him as a loyal and understanding companion—a man intensely and imperatively alive, physically, mentally, spiritually—to our friends who knew that this expedition was for my husband and me the sum of all our dreams come true, it must be evident that it is almost impossible for me to write of the remaining events of our Congo expedition; of how we laid his mortal body away in a tomb of solid volcanic rock in the midst of the country he loved, the ‘most beautiful spot in all the world’; of how we both had felt, on the entire expedition, that life for us was only at the beginning; and of how to me, life now seemed to have come to an abrupt ending; of how, ultimately, I found strength to go on alone, to complete to the best of my ability his unfinished work; and of how, in all these succeeding months his spirit has urged me on beyond any doubt or denial.

I can only add here an extract from a letter that I wrote from our Mikenô Camp:

“He seemed always eager to push on to his goal—the Gorilla Sanctuary—remarking at almost every camp, ‘This is a beautiful spot, but in the Kivu the beauties of forest and mountain surpass all this ten-fold.’ I sometimes felt he was torn between the physical desire to rest and the great urge of reaching the Kivu goal.

“The day we came up to this camp, as I walked beside him he would say, ‘Mary, this is the Kivu at last. Here the fairies play!’ or, ‘Isn’t this forest the most beautiful, the most ancient in all the world?’

“Raddatz helped me wonderfully at the end. We were able to make a vault eight feet deep in the lava gravel and rock. We made a coffin of solid, native mahogany. By cutting apart some heavy galvanized containers and storage tins, that we fortunately had in considerable quantity, we provided for it a metal lining. I covered it and upholstered it with our soft camping blankets. We lined the vault with closely set wooden beams. The plot it-

self is high with natural drainage on every side. Raddatz subsequently covered the grave with a slab of cement ten by twelve feet and five inches in thickness, bearing the name, CARL AKELEY, and the date, November 17, 1926.<sup>1</sup> We obtained the cement from Captain Tufnell in Kabale, but it was necessary to send our porters a second time, as nearly all the first supply was spilled or more probably thrown away en route by the natives who carried it. Surrounding the plot we built an eight-foot stockade, against the encroachments of the jungle and the herds of buffalo and elephant. Derscheid, Raddatz, Bill and I worked five days and five nights to give him the best home we could build, and he was buried as I think he would have liked with a simple reading service and a prayer.

"He often said he wished to 'die in the harness,' and 'to be buried in Africa.' He had done more in the nine months of his last expedition than he had previously done on a two years' expedition.

"His going was the one thing we never dreamed could happen on this trip. Every act and thought was vital, like that of a man in his early prime, and he worked without resting. Now I have what many lonely women lack—the memory of our great love and the inspiration of his noble, effective life-work, his genius and his high ideals. And so I feel he has not really left me, but that his spirit is here to help me. If it were not for that, I could not carry on."

<sup>1</sup> Recently the Belgian Government, through His Highness, Prince Albert de Ligne, the present Belgian Ambassador to the United States, has asked permission to place a commemorative tablet of bronze on Mr. Akeley's grave as a token of appreciation. This will be done, at the time of my next expedition to the Kivu.



## CHAPTER XVI

### SIX WEEKS ON MOUNT MIKENO

All of the work of the Congo Expedition was now before us, the completion of the Gorilla Group and the fulfillment of the mission from the Belgian Government. I was alone except for those whom I had known only since coming to Africa as co-workers in the field. Mr. Leigh, the senior member of the staff, came to me asking what I intended to do. There seemed to me only one answer—to remain and complete the work so far as we were able.

We located the scene which Carl had chosen as the background for the Gorilla Group, the photograph of which he had often shown me and which he considered the most impressively beautiful landscape in Africa. From a vantage point on the slope of Karisimbi a mile beyond our camp the view, framed by glorious, living trees festooned with mosses, included in the immediate foreground a monarch of the forest long since dead with naked, moss-draped arms reaching upward to the sky. It was at the base of this tree that the lone male of Karisimbi fell in 1921—a three hundred and eighty pound gorilla, the dominant figure in the Akeley Gorilla Group at the American Museum of Natural History.

The tree was surrounded by startlingly beautiful, varied and almost impenetrable undergrowth, brightened by brilliant blossoms of many hues. On the sharp declivity beyond, the billowy tree tops of the Kivu forest, when touched by the fitful sunlight and the stirring wind, shone lustrous in many changing shades of creamy yellow, aquamarine and emerald. Never elsewhere have I seen in the leafage of a forest so many variant shades of green. To the right rose the rugged rampart of Mount Mikeno on the perilous slope of which Carl had obtained his four other gorilla specimens for the group. Three thousand feet below the

forest foreground, stretched the wide expanse of desolate lava plain, an outflow in recent geologic time from the active volcanoes Nyiragongo and Nyamulagira, whose massive cones, topped by glowing, amber-colored smoke clouds, cut the far horizon. Below them to the southward stretched the pale blue sheet of Lake Kivu glittering with the reflection of the glowing sun as it sank into the hinterland.

The painting of such a scene is not for the maker of books. It is for the master limner. Frequently during our eight months together in Africa, Carl had remarked, "There is only one artist in the world I want to paint the Kivu, and that is Leigh." His interpretation of the African scenery had ever been a delight to both of us. Now in this, 'the most beautiful spot in all Africa,' Leigh executed his masterpiece. In addition, he made a remarkable sunset study of Mount Mikenno rising abruptly above our Kabara camp. He made color sketches of our plant accessories and finally, in the middle of December, he painted Mikenno and Karisimbi, the dominant mountains of the Parc National Albert, from the lower lava plain. Thus he created a complete panorama of the gloriously beautiful region.

Derscheid now bent all his energies to his task of obtaining valuable scientific data and of making a topographical survey of this region about which comparatively little had previously been known or written. At Burunga, Rweru, and now at our Kabara camp he established topographical stations and from these worked on the correction of the map. Accompanied by twenty porters, guides and askaris, he began a ten day survey trip of the volcanoes. With him I sent our gun boy, Bill, the most valuable asset in my power to bestow.

As an important part of his topographical work on November 26, 1926, Derscheid undertook the ascent of Mount Mikenno, previously unclimbed. Accompanied only by Bill—the Congo natives refused to go on the last climb—he climbed along the precipitous southern face of the mountain, reaching a point higher than any one else had ever been, an altitude of 4390 meters and within 40

or 60 meters (130 to 180 feet) of the great peak, the Castle, 4437 meters (14,420 feet) above sea level. He climbed along a new route and reached a point more than 1000 feet higher than that reached by the Duke of Pouilles on the southwest promontory. Along the last and most difficult part of his climb, Derscheid placed eight cartridges in four different conspicuous places in the rocks, thus marking plainly his route. Stopped by heavy clouds and the lateness of the hour, he abandoned any further attempt to reach the summit. Derscheid wrote an account of this partial ascent to his friend, Dr. P. G. Van Tienhoven of Amsterdam, who in June, 1927, published it in the *Nieuwe Rotterdamsche Courant*.

Derscheid's interest in the complete ascent of Mikeno continued. Accordingly in February, 1927, he asked Père van Hoef of the White Father's Mission to join him on another attempt in which they would take ropes and better climbing equipment. He explained to him that he had been stopped near the summit by storm and approaching darkness and outlined his route over the last cliff near the summit. But Père van Hoef refused on the ground that he had no time to spend in mountain climbing. Shortly after Derscheid left for Belgium, however, Père van Hoef decided to attempt Mikeno. He was accompanied by Dr. James P. Chapin of the American Museum of Natural History, recently arrived from a ten months' expedition to Ruwenzori. They attempted the mountain by Derscheid's route but likewise failed, reaching a point five or ten meters lower than Derscheid attained. In August, 1927, Père van Hoef again tried the ascent, this time accompanied by another Father from the Rugari Mission and by M. and Mme. Léonard, tourists of Liège, Belgium. They followed Derscheid's old route in the main. Having fine weather, they discovered a break in the last one hundred and fifty feet of rock and attained the actual summit.

Though three hundred and sixty-three feet lower than Karisimbi, Mikeno is wholly different in configuration. It is the most formidable peak of the region and offers many mountaineering

problems. Its rocks give treacherous footing; often friable, they are for much of the way covered with slippery moss and lichens constantly saturated with moisture from the plentiful clouds.

Derscheid and Bill also climbed Nyamlagira, which Carl had climbed and photographed in 1921. They spent three days and nights in the crater near the boiling pot, mapping every small chimney in the active crater. They also climbed the northern cone of Nyiragongo which had never before been climbed. Relying on the statement of T. Alexander Barns in 'Wonderlands of the Eastern Congo,' that 'there is a lake in the northern crater of Nyiragongo,' Derscheid took only his regular supply of water. However, there proved to be not a drop of water there and furthermore there was no trace even of the previous existence of a swamp. Derscheid, coming from the top of Nyamlagira, reached the cone after two days and one night. His water supply was long since exhausted. In spite of the fact that he and his black men were nearly dead of thirst, he spent a night on the top and half of the next day exploring and mapping the crater. It was not until evening of that day that they reached a swamp on the lower slope of the volcano where he obtained water. Boiling it as quickly as possible, they gulped it down without waiting for it to cool. Derscheid was spent indeed when he finally reached food and good water in the camp of the Belgian Administrateur, M. du Buisson, at Kibati, where he was supervising the grading of the motor road to connect Lake Kivu and Rutshuru. Derscheid had been three days and two nights on the lava plain unsheltered from the sun and without any water and with forty Congo porters, all of whom were threatening to desert. That experience was one of the most trying he underwent in the Congo. No wonder that he regards Bill, who loyally stuck to him and assisted him in holding the Congo porters together, as a 'friend in need.' Later Derscheid went up the frequently climbed central cone of Nyiragongo, which the Duke of Brabant in 1925 and Prince William of Sweden in 1921 had ascended and which was first climbed in 1894 by Graf von Götzen, the discoverer of Lake



Kivu. Derscheid also climbed the southern cone where T. Alexander Barns had been.

Derscheid made the third successful ascent of Karisimbi. It was first climbed in 1904 by Father Barthelmy of Nyundo (Ruanda) Mission. The second ascent was accomplished by the botanist, Milbracht, and the geologist, Elgon Kirschlein, of the Mecklenburg Expedition. The records of their climb Derscheid found without difficulty in a cairn at the actual top of Karisimbi.

Derscheid climbed Karisimbi twice. In March, Dr. Joseph Bequaert, Dr. David H. Linder and Dr. M. Theiler of the Harvard African Expedition (1927) were guests in his Rukumi camp on the slopes of Karisimbi. They all tried to ascend Karisimbi but were forced back by a blizzard. On the following day, Theiler and Linder went to the top while Derscheid and Bequaert went to study a herd of buffalo. The next day Derscheid again went to the top of Karisimbi, finding the names of Theiler and Linder and bringing back some cigarettes which they had forgotten. From the top of Karisimbi, Derscheid brought back some interesting specimens of lava now under investigation by M. de Dorlodot, attaché at the Congo Museum, Tervueren, who is of the opinion (October 1928) that it is a new lava previously unknown.

Derscheid with Mguru, the gorilla guide, early in 1927 climbed Bishoke, the third of the Parc National Albert volcanoes forming the home of the gorillas. It had previously been climbed by several expeditions—by a German, by one of the Fathers and by a Belgian geologist. Here Derscheid made an extensive study of the local topography, measuring the circumference of the crater and the depth of the water in the beautiful lake at its bottom. It is pure water, without plant life and only slightly saline. Future explorers who rely upon finding a lake at the top of Bishoke will not suffer the hardship which Derscheid underwent on top of Nyiragongo. Wishing to come down Bishoke by a different route, he found the descent difficult as compared with the ascent

on account of the peculiar broken configuration of the ramparts of the volcano.

When Derscheid and Bill returned to our Kabara camp after an absence of two weeks, they were a sorry sight. Their strenuous work had left them ragged, weary and emaciated. Although their shoes were well nailed and almost new when they started on the trip, they came into camp practically barefoot.

It devolved upon Raddatz and me to run the work of the expedition in our Kabara camp. A most important part of this work was collecting and preserving plant specimens to be used as studies for the foreground of vegetation in the gorilla group. We first studied the vegetation at the base of the old tree—the central foreground figure for the Gorilla Group. Although wild celery is the dominant plant in the gorilla forest, yet we found more than fifty different varieties of plants. From these we selected twenty-two of the most prominent. First I photographed the scene in great detail, thereby supplementing Leigh's painted study. Then we collected a fine specimen of each plant which Raddatz preserved in formalin. Next he made more than two hundred plaster casts of the leaves and stems of the chosen plants. Both formalin specimens and plaster casts here prepared were to be taken to America as guides for the artificial reproduction of the vegetation in the Museum laboratory.

The making of the plaster casts proved a very long and trying job. Raddatz performed this work with the greatest care and under the most unfavorable conditions. As it was extremely cold and damp, he constructed a bamboo hut, covered on roof and walls with canvas tarpaulins and open only to leeward for the admission of light. It was necessary to keep one or two charcoal stoves burning there all day in order to render the work possible—to keep his fingers from growing numb with cold and to dry the casts.

For each plant specimen I made photographic studies as it grew in its natural environment as well as close-up stereoscopic photographs which would serve as a basis for intimate laboratory



*Photo. by Mary L. Jobe Akeley.*

MT. MIKENO. IN THE RIGHT BELOW THE TREES, MARY AKELEY'S CAMP AND  
CARL AKELEY'S GRAVE.





*Photo. by J. M. Derscheid.*

THE PALE BLUE SHEET OF LAKE KIVU GLEAMED FAR BELOW THE KABARA CAMP.



*Photo. by Mary L. Jobe Akeley.*

THE BAMBOO HUT IN WHICH RADDATZ MADE THE PLASTER CASTS OF THE KIVU VEGETATION.



study in America. In addition to these I made detailed photographic studies of the two typical Kivu forest trees which I selected as a frame for the Gorilla Group. Like hundreds of their kind these trees were ancient, hung with clumps of parasitic ferns, and decorated with great platforms of golden-green, velvety moss and pink orchids. These 'platforms' are great cushions of moss, often two to three feet wide, carpeting horizontal limbs for distances of twenty or thirty feet. In the completion of all this accessory work, we were constantly hindered by the worst of climatic conditions.

During the same time of year while in the Kivu in 1921, Carl had had much fair weather even in the midst of the rainy season. In contrast we had very little sunshine during a period of seven weeks. The weather which had begun so inauspiciously in a storm of cold mist at the Rugari Mission and which had continued through Rweru and up to the Mikeno camp, made most difficult all the work of our expedition. Our permanent camp was located at 10,627 feet above sea level, in the saddle between Mikeno and Karisimbi where all the winds of heaven 'chop and change.' In seven weeks we saw the sun only six times and then for a brief period during the day. Often in the early dawn we walked out on white hoar frost which crackled underneath our feet. On the days that it did not actually rain, a heavy mist fell and it was cloudy and dark. For the most part the clouds that drove down from the two volcanoes and enveloped us in their icy blanket were of the density of a 'pea soup fog.' From my tent the cook shack one hundred yards away was frequently invisible. We had storms of rain and heavy sleet. Hail stones once remained on the ground three days.

Under such conditions photography was most difficult. Many of the photographs were taken through the mist and the results, satisfactory beyond my greatest expectation, speak well for the quality of lenses and mechanism of camera. In addition to using my own Goerz camera, which I had used throughout the expedition, it was necessary to teach myself the use of the large pano-

ramic and stereoscopic cameras both of which were unfamiliar to me. This study filled many a long evening. We were kept very busy with more than four weeks of unremitting work.

On the few rare occasions when the sun shone out I made the most of the favorable light and traveled considerable distances into the forest. I recall the occasion on which I photographed the old gorilla tree. The tree was located sixty yards almost perpendicularly below Leigh's camp. My boys cut an opening almost two thirds of the way down the declivity. There, clinging to the steep mountainside, I anchored my camera—Raddatz and one of the boys lay flat on the slope with heels dug into the soft earth and steadied my tripod for me. The scene was so beautiful and so important that I remained there for more than an hour in the hot sunlight of mid-afternoon, to which I had become unaccustomed after living so long in the clouds. Much of the time my head was necessarily under the heavy black focusing cloth. I dug footholds in the earth, for all the world like digging footholds in a steep snow slope. For further support I clung to the near-by undergrowth. When the task was over, I was aware of feeling strange. My head seemed detached from my body—sailing through the air. Raddatz, noticing that I was tottering, assisted me to Leigh's tent, where for an hour or so, I did not know exactly what was happening. In the evening I traveled down the mile and a half to our base camp.

At night the mercury fell to  $32^{\circ}$  or  $34^{\circ}$  F.; the wind blew so strongly and steadily that our tent ropes and pegs were loosened and even in the shelter of the trees, our tents and protecting flies lifted and pounded like sails bellying in a gale.

Ever the constant fires of Nyamlagira lighted the western horizon. Often crimson, lightning-quick flashes shot into the cloud mass. Again the cone appeared clear and flaming, its seething, bottomless furnace fires leaping far into the heavens. Occasionally I caught glimpses of the moon and stars as the great gray clouds drifted to and fro. Sometimes in the early darkness and again just before midnight I could see brilliant Orion in his

stately westward march across the sky. And in this remote spot where I felt so utterly detached from every chapter of my past and with no ability or desire to project myself into a future, the Mighty Hunter of the Heavens seemed to look down upon me with compassion like an unchanging, watchful friend.

I shall not live long enough to forget the kindness of my black boys after I was left alone in the Congo. For a week Bill kept me constantly under his eye. For many days he scarcely ate or slept. Leaving his own comfortable tent that Carl had given him, he lay at night in his blankets at the door of my tent; but if I so much as turned in my cot, he was alert and listening. When I could not sleep at all, he kindled the fire and sat beside me for a while and then, pleadingly, "Now, Memsahib, try to sleep! You never sleep; very soon you be sick! Very bad, you get sick up here!"

Bill constantly drove both Kivu and East African natives to their maximum effort. To carve and dig my husband's tomb out of the volcanic rock had been a long task requiring heroic effort. Raddatz had determined it should be eight feet deep and lined throughout with mahogany timbers. To this end Bill had kept fifteen natives at work by day and by lantern light for four days. Bill had never stopped. Accustomed to command, he by his own indefatigable exertions had compelled the others to follow his lead. He had commandeered all of our personal staff and had made each one do his share. When the tomb had been excavated, Bill and Raddatz spent a day in preparing the mahogany inner vault and in lining it again with bamboo. No pains or toil were too great. For Bill too it was wholly a labor of love.

In all the real problems and difficulties involving transactions with the Kivu chiefs or boys, Bill took the initiative. It was as if the spirit of his master had descended upon him actuating him to transcendent effort. In the stress of these dark days in the Kivu and until the moment I said good-by to him in Africa no one could have taken his responsibility more keenly than Bill. His 'Bwana' had left him a task to fulfill, as concrete and definite in

Bill's mind as in the mind of any one of us. Without him I wonder how we would have fared. Whether urging the Congo natives to their best, assisting on a difficult mountain climb, rationing out the food, or preserving the morale among our East African boys, he was always the acme of judgment and loyalty. His decisions were quick and pertinent; his orders so clear and definite that no one dared to disobey. He was guide, interpreter, dictator in native affairs, friend. *Consolator afflictorum!* Bill has never heard the words! But his heart knows their meaning—his faithful, devoted heart which time will never change.

During the first few days after I lost my husband, our personal black boys were remarkably understanding. If ever I left any outside task and went to my tent, I was not allowed to remain there alone. One and another came and sat with me quietly at the door of my tent, rarely speaking. During Bill's absence with Derscheid, my cook, Enoka from Western Uganda, who knew a little of the Kivu language, stood by me and was of the greatest assistance. He explained to the natives that they must help me all they could; that, since I worked all day with my hands in the forest clearing the plot around my husband's grave, they, stronger than I, must do all the heavy work; that if I, a white woman, could work out in the cold rain, then they should not desert the job. Then he, rare cook indeed, got down in the big ditch we were making to drain the burial site and showed them how to dig and dislodge the rocks, and how to build them into a retaining wall.

When I had first seen our safari of two hundred porters at Kabale, waiting for their loads, they had seemed a horde of naked blacks without individuality or personality, but nine weeks of close contact with sixty to two hundred natives had brought to me a different conception of them. Now with few exceptions our Kivu savages, lower in the scale of intelligence than any others I had seen in Equatorial Africa, proved kindly men, always with great pity and gentleness in their hearts for one who was in need. How deeply their dumb sympathy affected me! As I think of them, I am reminded of the only playmate and companion of my



early childhood, a collie dog who when I was hurt in our running games, would come to me with a look of profound feeling and compassion in her eyes that spoke as clearly as any words.

One of our heaviest tasks was clearing the plot around my husband's tomb and in building the palisade of green logs set vertically in the ground as a protection against the onslaught of the jungle. At that time I had sixty porters and as the day temperature was only 40° to 45° F., I worked them in relays of fifteen during periods of two hours each. Their only covering was a loin cloth of goat skin and rather than have any of them standing about idle and shivering, I had their native *neapara* call each crew in turn. In this manner one fourth were always warm, as I saw to it that they were constantly engaged in active physical exercise, while the three fourths remained comparatively comfortable by their little fires in their huts of grass and sticks and vines under the beautiful sheltering trees.

When the day's work was done, about four in the afternoon, all the porters headed by their *neapara* came over in front of our work tent for their posho of dried beans, or banana flour or potatoes, or sometimes green bananas, which they boiled. They sat in a circle, each with his spear or staff beside him—a weapon a native is unwilling to leave behind—while Bill and Enoka, assisted by the Congo *neapara* gave them their dole. On extremely cold and wet days each boy, shivering and shaking and with a most inhuman expression on his face, gripped closely a small burning log to keep him warm. The boys invariably carry firebrands when necessary for them to leave their huts in the dark. As soon as their all too small ration was measured out to them, they trotted off to the single enjoyment of the day, the cooking and eating of their one scant meal.

Each morning, as I went to them to lay out the work, nearly every one would salute and say, "*Jambo, mama*," (Good morning, mother) and with the greeting often came a smile. Each late afternoon one old bearded fellow with considerable personality brought a load of wood for my camp fire. If any embers were

still glowing there, he crouched over them for a long time, smoking his long black pipe. Then, slowly getting on his feet, he would face around straight in front of my tent door and there he would stand for five or ten minutes, watching me at work on the notebooks and records at my desk. Finally his real desire would come out, "*Chumvi, mama*," (Salt, mother). Salt, of all things, was what he craved. I told him I had none—"Kwenda mpishi," (Go to the cook). But he knew my thrifty cook would not give him any, and so he continued to stand there and by smiling and grunting was so childishly pleading and persistent that I usually relented and sent my tent boy up to the kitchen for a little salt. He took it gratefully and carefully and I suppose ate it with his beans that night.

One day he appeared in my tent door to thank me for my kindness to him. He would like to stay with me until I leave the Congo, he said, but if he did not stay all the time it was because he wanted more to see his wife and little *toto*, only five days old when his chief called him to come up to the gorilla mountains.

It seems to me that God must care for these, His black children, just as for the ninety and nine who dwell in the land of plenty and have a goodly heritage. Surely, these men who go by night through this dark forest, peopled by gorilla, elephant, buffalo and leopard—these men who at their chief's command and without demur travel on errands of mercy, receiving only slight reward—surely these men have high courage and angels and ministers of grace walk with them.

A very serious problem was that of our porters' food supply. Although the soil in the Kivu and even at the base of the volcanoes is richly productive, yet agriculture is still in its infancy. The tilled fields are small and poorly cultivated. Many of the natives merely put the seeds in the ground and wait for the crops to mature. The Congo porter eats beans, but the headman, the askaris and our own East African boys demanded rice. I, therefore, had to have a group of porters almost constantly in transit to and from Kisenyi, the Rugari Mission or Rutshuru in order

to obtain any available food. The small chief at Burunga visited us, sent me frequent messages, and considerably sent a few potatoes, two sheep, and one small ox. The chief at Kigezi sent all the food available, but there were times when I felt thoroughly ashamed to ration out such small supplies to our porters as I was compelled to do and to receive in turn their disappointed looks. One day when there was no food whatsoever in camp for them, I gave them sixty pounds of our own white flour. They seemed to appreciate it and to sense that I would not willingly see them hungry.

With such a shortage of food, I now sent twelve porters away on leave and on their return cut down my entire staff of Kivu porters to ten. Many were really suffering from the cold and had become ill from being at the high altitude to which they were unaccustomed. They were asking to go back to their homes. I now held these ten, whom I needed for carrying wood and water and for portering Leigh's prepared meals up to his camp, by promising them relief in a week or ten days. Only one deserted. I then sent an urgent request to the authorities at Rutshuru and to the chief at Kigezi for more porters. Although relief did not come in the appointed time, the porters stayed with me. In fact, their manifestations of loyalty and readiness to help in my extremity amazed me.

Our water supply in the near-by swamp now proved insufficient, just as it had for my husband in 1921. Despite the abundant rainfall, the water quickly disappeared owing to the porous character of the volcanic soil. Finally our swamp became little more than a muddy pool, hardly fit for washing our hands. The supply had long since been too small for a bath. I now sent the porters down to our Rweru camp where in the canyon, in a small rocky basin of the water course, a considerable pool of water still remained. It was a day's job for six of the porters to carry up the debbies of water. Finally a heavy rain replenished the swamp supply and we were thus permitted to remain until we had finished our work of painting background studies, collecting plant

accessories, making plaster casts, photography and completing the topographical and zoölogical survey.

It was six weeks before our work in the gorilla mountains was finished. During this period in the Kivu volcanoes the whole question of our food and cooking was a very serious one. We had all of our staple chop box food supplies with us. In many places in Africa we had been able to get fresh fruit and vegetables, but here the supply was practically nil. I knew that the working capacity of the others depended upon wholesome, appetizing and abundant food, and to the end that they should have it I bent all my energies. In this emergency Enoka, my cook, was one in a thousand. We built a little kitchen and dining *bema* (hut) of poles, thatched and walled with bamboo which the boys cut and carried up from 2500 feet below us. Through both these hovels the wind swirled constantly. It was under such conditions that Enoka had to prepare food to send daily to Leigh and periodically to stock Derscheid for his long trips, as well as to cook for us at the main camp. Furthermore he baked all of our bread—not biscuit or bannock, but proper yeast bread. His wood was bad, his water supply short, yet in all the weeks we remained in this camp he never uttered a single complaint to me nor questioned the carrying out of my menus. His coöperation was complete. Often in the early morning when I would go over to his kitchen, I would find him barefooted, wading through pools of mud and water hunting for some dry twigs or standing with equal unconcern in the hot ashes building up his fire. He asked me to take on a Kivu *toto* as kitchen assistant, as I had sent his regular *toto* up to help Leigh's personal boy in his camp. "He will cost you only ten francs (thirty cents in United States currency) a month," Enoka had used as argument. From this boy, who also spoke his language, the cook learned much of the Congo dialect and was able to secure for us and our boys many articles of food from the natives at the foot of the volcanoes that we would not otherwise have had.

We had brought a number of chickens from Rutshuru and the





THE HAGENTIA ABYSSINICA ("PAPER BARK TREE") IS ANCIENT, HUNG WITH CLUMPS OF PARASITIC  
FERNS AND DECORATED WITH PLATFORMS OF VELVET MOSS AND PINK ORCHIDS.  
Photo. by Mary L. Joly, Holey.



*Photo. by Mary L. Jobe Akeley.*

THE SCENE WHICH CARL AKELEY CONSIDERED THE MOST BEAUTIFUL SPOT IN AFRICA  
AND WHICH HE DESIRED AS THE BACKGROUND FOR THE GORILLA GROUP.



cook turned them out in our camp. How they lived I do not know, as there were few scraps of food thrown out. The boys gave them a little corn meal and they became expert in catching insects. When cooked they might have been anything so far as flavor was concerned. Cooking food is quite difficult at this altitude, and the results unsatisfactory. In Nairobi we had obtained a pressure cooker and that simplified the task considerably both in the wood consumed and in the time required.

During the afternoon when my outside tasks were finished, my work required me to be in my tent. Raddatz, making plaster casts of vegetation, was in his work shop, into which the wind blew constantly. We kept ourselves warm by wearing our heaviest clothing and by constantly firing our little charcoal stoves. Here at forty four degrees above I required far more clothing than when camping in the open in winter in the Athabasca Valley at forty degrees below. Often the wind from snowy Karisimbi was so strong and the tent so cold that I had to tie up the flaps and work by the feeble light of my oil lantern.

Although for weeks on expeditions in the northwest I had lived at an altitude of 7000 to 9000 feet without experiencing any physical discomfort, yet during all this time, we each experienced shortness of breath at this high altitude of nearly eleven thousand feet. As I went about the forest on my photographic expeditions and up and down to Leigh's camp, I had to travel very slowly and rest every half or quarter of a mile. During five weeks I had eaten very little and had lost thirty pounds in weight, and my general weakness may easily have accounted for much of my difficulty in breathing; yet I believe that it would prove very trying for the average healthy person to remain for a long period under the conditions we experienced in our Kabara camp.

Mguru and one or two others of the porters were excellent charcoal burners. Every second or third evening just at twilight they built their charcoal-burning fires outside my tent. It was the signal for all of the most socially inclined Kivu natives to foregather. The fire was lighted and green sticks were piled on

and then when one-fourth consumed the fire was smothered and the air excluded by a blanket of green branches and the burning brands charred in this improvised retort without being consumed. Then all the sticks were broken up and the crumbling fragments were raked out on the moist earth to smoulder and die out. Thus our very necessary supply of charcoal for our little heating stoves was produced.

As an example of the eccentricities of the weather, I quote from my diary of December 18, 1926.

"This morning it looked fairly promising at six thirty, so I dressed quickly and we had breakfast at seven, our usual hour for the past month. I hoped it would be a fine day for photography. Little patches of blue sky were showing through the mists above Karisimbi and the clouds were high—large, soft, white, cumulus clouds. But the heavy slate-gray pall which almost daily hung over us, still lowered in the east. At eight-fifteen the sun broke through and I hurried Bill and my camera boys out into the forest, for I was eager for more photographs of gorilla nests and especially of the one I had selected as the group accessory. We had just started up the slope beyond the swamp when a sudden driving wind bore in upon us from the east, bringing the heavy black cloud right into the forest and completely precluding any thought or possibility of photography. Now just one and a half hours later (11:30 A. M.) I am in my tent writing at my table in twilight. It is scarcely possible to see the page. I must stop and light my lantern. But outside the birds twitter and sing in the cloud and mist and almost put to shame my gloomy thoughts."

This morning was typical of more than forty days in the wilderness. Though almost on the equator we were, in our volcano camp, by elevation, in the northern belt of the temperate zone.



## CHAPTER XVII

### GORILLA PARADISE

IN the Kivu forest the gorillas range from 7500 feet at the lower edge of the bamboos, up through the *Rugesbi* or cold forest and on to the *Rutiti* or sub-alpine zone, more than 12,000 feet in elevation.

We saw our first gorilla trails in the upper edge of the bamboos on the west of Mikenó and Karisimbi. They had been ranging all about our Rweru camp near the small water course, the *Kanyanamagufa*, 'Canyon of Death,' only a few rods northeast of my husband's old gorilla camp of 1921. Here the gorillas had been feeding chiefly on the succulent sprouts of the young bamboo and also on the bark of some vines. The young shoots of bamboo, pinkish gray in color with a covering of dusty brown, have a sweetish bitter taste. The gorilla eats the tender shoots entire, while the more sturdy stalks he tears open and eats only the inner portion.

The bamboo forest, spoken of by the natives in the Kinyarunda language as the *Rugano*, is cold and humid. The vegetation is made up principally of bamboo (*Arundinaria alpina*) either growing by itself or in a mixed forest with a dogwood-like species, *Cornus volkensii* (Harms),<sup>1</sup> and one like a bay, *Myrica salicifolia* (Hochst),<sup>1</sup> and a number of other plants.

This mixed bamboo forest extends in a continuous belt of varying width around the central mass of the volcanoes Mikenó, Karisimbi, and Bishoke, and towards the south it continues without interruption to the great bamboo forest called *Rubengara*. Towards the east it stretches around the eastern massif, climbs up between the three volcanoes and covers the two passes separating them.

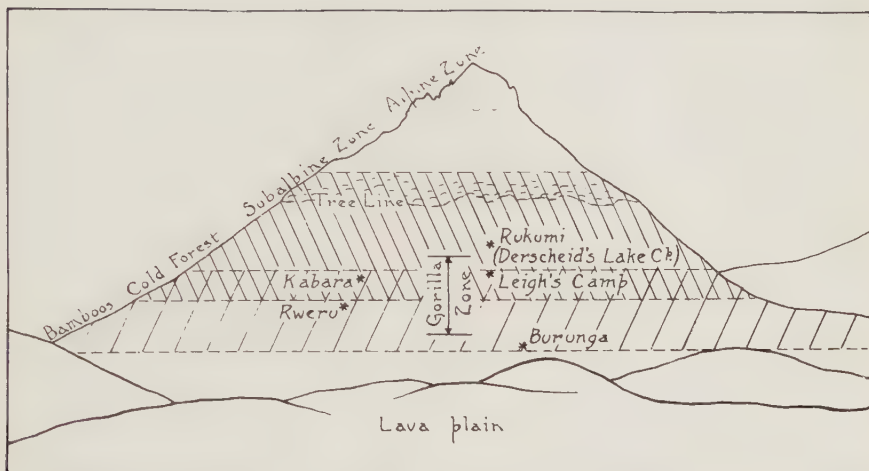
<sup>1</sup> These botanical names were supplied through the courtesy of Dr. David H. Linder of the Harvard African Expedition, 1927.

The bamboo forest, either mixed or pure, grows on the steep mountain slopes and for the most part is so dense that no human can travel through it without crawling on all fours or cutting out a trail, even though the bamboos are here relatively small as compared with the giant specimens on Mount Kenya. In general the forest is more varied than the Kenya forest. Where the bamboos flank a concave or flat volcanic surface, there is an undergrowth of nettles, tall profusely growing balsams with small pink flowers, single pinkish white fuchsia-like flowers, white veronica, and many brilliant violet, carmine and yellow orchids. Near its upper edge, the gorilla forest is dotted at wide intervals by large trees growing to a height of one hundred feet or more. As the bamboos grow compactly to a height of ten to twenty feet or more and are topped with dense feathery foliage, the forest during the day is enveloped in twilight, and on moonless nights the darkness is intense.

Here in the central group of the volcanoes, elephant, buffalo and gorilla travel through the forest by breaking out a trail. The great anthropoid travels hither and thither for his forage and constantly makes new trails, apparently without effort or hardship. That his hairy coat remains unimpaired is evident from the excellent condition of the skins of the gorillas my husband collected in 1921.

On our way up from Rweru to our permanent camp at Kabara on the saddle between Mount Mikeno and Karisimbi, my husband and I heard a band of gorillas feeding near the trail. A short, deep bark gave evidence that they noticed us. They were not particularly disturbed, however. They were moving slowly, even though our safari of two hundred porters had preceded us on the trail.

Our main camp on the Kabara saddle was in the heart of the gorilla country. As I had from thirty to sixty natives constantly in my employ, there was the usual amount of noise attendant upon a camp of that size, yet gorillas frequently came within three quarters of a mile of camp and fed and slept there. It was



#### LEGEND-WILD CELERIES

	Kisengo sengo ( <i>Anthriscus sylvestris</i> )		Kihunga muyaga ( <i>Peucedanum herstenii</i> )
	Gorilla		by Gorilla
	Food of		Never eaten

DISTRIBUTION OF VEGETATION ON KIVU VOLCANOES AFTER J. M. DERSCHIED.



*Photo, by Carl Akley.*

A FAMILY OF GORILLAS PHOTOGRAPHED BY CARL AKLEY IN 1921. THE FIRST MOTION PICTURE EVER MADE OF WILD GORILLAS. THEY ARE IN A FORKED TREE A FEW FEET ABOVE THE GROUND.



near here that my husband had made his motion pictures of gorillas in 1921—the first ever made of wild gorillas.

My photographing and collecting necessitated frequent travel through the forest a few miles in varying directions from camp. Although the demands of this work did not give me the opportunity for the long and intimate study of the gorilla which my husband and I had both anticipated so keenly, yet I did at least have a chance to study long and comprehensively the gorillas' home in the high mountain altitudes.

In this cold forest (*Rugesbi*) from 9500 to 12,500 feet, where the climate is cloudy and wet, the gorillas' home is beautiful beyond any words to describe. 'The abode of the gnomes and fairies,' my husband had called it in 1921. His gorilla expedition had been favored with much more sunlight than we found in 1926-27, yet, whether in cloud or rain or driving sleet-storm, this primitive forest with its pervading influence, age-old and unmarred, ever remained to me a symbol of what the world must have been before the age of man. Everywhere glorious ancient trees are decorated with flowing draperies of gray-beard moss, and with long trailing green parasitic vines (*Sedum Meyeri-Jobannis*, Engler),<sup>1</sup> dotted with tiny yellow star-like flowers. Small hornless chameleons glide up and down along their lower heavy branches or bask rigid and almost invisible in the tiny patches of golden sunshine that filter through the thick growing leaves. Squirrels scurry to and fro, or sit chattering noisily on some mossy pedestal, decked with drooping fern fronds.

There are two outstanding trees in the Kivu forest. One, a tree with very small leaves, has a yellow, single flower like a wild rose. This 'wild rose tree' has a rough bark like a black oak and grows to a height of fifty or sixty feet. The natives call it *Musungura*. The botanical name is *Hypericum lanceolatum*, the family *Hypericaceae*. The other dominant tree we called the 'paper bark tree.' It has thick clusters of leaves almost like a white walnut and often reaches a height of from seventy to

<sup>1</sup> See note p. 207.

one hundred feet. In the months of March and April, it blooms profusely in great clusters of magenta-violet colored flowers, each shaped like a lily. In their abundance and color, they remind one of wistaria in full bloom. When the blossoms fade they become cinnamon brown in color and look like tissue paper festoons. The natives call this tree *Mugeshi*. The botanical name is *Hagenia abyssinica*, family *Rosaceae*. In the Parc National Albert both these trees attain dimensions unknown elsewhere. In this latter tree as well as in the *Hypericum* are great platforms or cushions of green and golden moss, out of which grow clumps of orchids (*Disa*) flowering in tall red and pink racemes. We saw as many as twenty-five or thirty of these flowering spikes in one platform of moss. Other flowers grow in great abundance. In the open spaces, where the sunlight filters through, balsams (*Impatiens*) grow to a height of four feet and bear a few single rose-pink blossoms. The undergrowth is composed largely of wild celeries, which will be described later. There are also found a broad-leafed, dock-like plant (*Rumex nepalensis*), buttercups, groundsel, and a tall blackberry attaining a height of ten or twelve feet with large pink-lavender rose-like blossoms. Its thorns are sharp and long and its large fruit is very sour even when fully ripe. Here and there thickets of giant nettles (*Girardinia condensata*) with formidable barbs completely close the trail even to gorilla and elephant.

Frequently, rooted in the mossy platforms covering the branches of the trees, lobelias of great size grow. Their main stem is thick, strong and woody. Once I found a small fallen but still living tree about ten feet long and six inches in diameter. It nourished six of these lobelias each about five feet high and four inches in diameter and with luxuriant palm-like tops. About twenty feet from the ground and growing out of the crotch of a tree, I observed another tree (*Agauria*, family *Ericaceae*). It was easily eighteen feet high and resembled our mountain laurel. The tree was so symmetrical and the foliage so beautiful that I was eager to get it to plant near my husband's grave, but the roots were

so firmly embedded in the large supporting tree that the natives were unable to dislodge it. However, later I secured twelve of these trees, rooted in the ground, and planted them in an avenue leading to his tomb. In view of the heavy rainfall and the cloud mists that envelop the forests the vegetation is rarely, if ever, dry. It has little chance therefore to become woody as small shrubs are apt to be in a drier climate.

From the mossy platforms dark green ferns (*Polypodium excavatum*), from one to four feet in length, hang in long fringes and flutter and sway in the passing breeze. Dense creeping vines (*Galium spurium*) grow twenty to thirty feet upward from the ground, clinging tenaciously to the tree trunks and covering and trailing from the forked branches in wide, banner-like screens of delicately beautiful vegetation. It seems a world wholly unreal. Everywhere is enchantment. Here in the rare amber sunshine dryads dance from fluttering fern frond to golden blossoming bough. Whether on moonlit or darkened nights, in the hidden, vine-draped cryptic recesses of the tree trunks, gnomes guard forever the secrets of this forest faëry land. It is in the protection of these luxuriant vine and moss canopies and in the dense undergrowth that the gorilla, the giant of the forest, most frequently makes his bed.

The gorillas go even higher than the cold forest, climbing into the Rutiti or sub-alpine zone, where grow treelike members of the heath family, especially *Phillipia johnstoni*. Here the wild celery, one of the main articles of their diet, is absent. Although Derscheid found gorilla nests in this zone, he thought it probable that the animals do not stay there long, since it would be more difficult for them to gather the enormous quantity of vegetable nourishment required for their daily needs than in the lower regions of more abundant vegetation. In the marshy regions in the sub-alpine zone not covered by the Rutiti, there is a different flora whose most characteristic representatives are the large blue-green sedge (*Carex runssoricus*), groundsel, and giant lobelias. Here Derscheid found no traces of gorilla, neither

in the more elevated regions where grows the giant groundsel (*Senecio*) nor in the alpine region where grows a member of the rose family, *Alchemilla cinerea*. The only large mammals found in this higher region are the buffalo and an occasional leopard in search of the hyrax which is numerous there.

In the cold forest near our camp, I happened on twenty-two recently occupied gorilla beds. All were in close proximity but they varied somewhat in kind and in structure. The majority were at the base of vine-draped trees, where the earth was protected from rain. Vines, green or dead, formed a shelter like a half tepee at each side of the overhanging trunk. Dry earth with a few dried vines or dry moss formed the bottom of the nest. Some of the beds were only slightly depressed; others were hollowed out to a depth of ten or twelve inches. In three instances in this group of twenty-two nests, I found a large nest side by side with a very small one, evidently that of mother and young. Under one tree I found one pair of these nursery nests; under another, not more than three feet away, I found another pair almost identical in size. There was no evidence that either had been used more than once. In fact, it seems that the gorilla makes his bed anew each night. I am convinced by the number of freshly-made clean nests that the gorillas spend much time asleep during the day as well as at night. Many nests were made of the lush, green herbage, fashioned in a circular form like a basket. Some were quite clean; others contained traces of occupancy.

The gorilla makes his bed in the simplest way, by drawing together the vines, plants and dead twigs which happen to be within easy reach. Round about all these nests I saw many foot and hand prints. All told, I saw more than fifty beds, old and new, all of which were on the ground. Gorillas as a rule build their nests on the ground, but Derscheid found *four* exceptions while observing *two hundred* nests during his seven months' stay in the Kivu. One nest was about twenty feet above the ground in a tree twelve inches in diameter whose trunk inclined at an angle of sixty degrees. This nest was built on a platform of thick





*Photo. by Carl Akeley.*

A GORILLA NEST AT THE BASE OF A VINE-DRAPED TREE IN THE RUGESHI,  
THE COLD FOREST,



*Photo. by J. M. Derschheid.*

THE BATWA (PYGMY), THE MOST INTERESTING OF PRIMITIVE PEOPLES, WILL BE LEFT UNDISTURBED IN THE PARC NATIONAL ALBERT, IN HIS ANCESTRAL WAY OF LIVING.



branches directly above a group of large nests. It was obviously the sleeping quarters of a small, agile animal, too large to be protected by the arms of its mother, and yet young enough to wish to sleep out of harm's way.

The most unique nest I found was built of the broad leaves of the palm-like plant which the natives call *Muiloomba* which grew here in a dense thicket. The gorillas had broken off the tops of the plants which were easily six feet high, and the stalks were everywhere exuding a milk-white sticky juice like that of the milkweed and poppy. The nest, somewhat hidden in the thicket, was built on a slope of ground with a log about eight inches in diameter as the lower margin. The broad leaves were laid one upon another, with a great deal of care and precision such as a bird displays in building a nest. This nest was the deepest I saw, being about twenty-two inches in depth, and the same in diameter. It was quite clean. I think I would have found any one of these beds comfortable enough for a good night's sleep.

This particular gorilla band had fed over an extensive area in which the large trees grow far apart and the undergrowth is so dense that you must cut or break your way through it with native knives, because it is too sturdy for man to trample down readily. The wild celery, growing luxuriantly, reaches a height of six to eight feet. It is the most interesting of all the vegetation because here it undoubtedly is the gorilla's favorite food. As you break or cut your way through the celery thicket, you hear the rank stems crackle under your feet, as if you were walking in a field of fresh young rhubarb in the springtime. The stalks are so lush and filled with water that they break with a snap. There are two varieties of wild celery, growing in different zones (see sketch), one, varying perhaps with age from a very fine and delicate leaf, to a very coarse leaf; the second, having a medium sized leaf. The former variety is called by the natives *Kisengosengo* (botanical name, *Anthriscus sylvestris*). The second, the natives call *Kibunga Muyaga* and is known botanically as *Peuce-*

*danum Kerstingii*, Engler.<sup>1</sup> This latter variety the gorillas do not eat. It grows even above the tree line where it is small and dwarfed by the altitude. They are both of the family *Umbelliferae*. This wild celery has certain points of likeness to our cultivated celery. The leaves are similar, although the leaves of the wild celery are far more complex. The wild celery stalk is thick and succulent, and the young shoots crush or break readily. Even the odor is suggestive of our cultivated celery, although it is milder in scent and flavor. In color the stalks are pinkish green. Near the roots they change to a reddish purple color. It is similar in color to the pascal celery grown on the south shores of Lake Erie. The plants, when mature, are topped by masses of dainty white flowers.

The gorillas pull the celery out of the ground and feed on the succulent roots and inner and lower stalks. In their feeding grounds I saw where they had stripped the outer stalks and had eaten the tender hearts. Around lay the drying, yellowish outer husks. Once the gorillas had climbed seven or eight feet upon the large overgrown base of a half-dead tree, suggestive of flying buttresses, and there had trampled and torn and eaten the dense vegetation. When the gorillas have finished their meal, the 'celery patch' looks something like a field of young corn after hungry cattle have had their fill.

It is an established fact that the gorilla travels under easy sail and it is not difficult to see which way he is going, as the vegetation is all broken down in that direction. Three days after I inspected the twenty-two gorilla beds, Derscheid came upon a band of about twenty gorillas three miles south of our camp and following the same route that the gorillas I mentioned had taken. It may easily have been the same band. I had followed their trail for some distance and had found that they had been feeding leisurely all along the way on trails that crossed and re-crossed.

The gorilla has no reason to hurry. He has nothing to fear and food is abundant everywhere. Although he can run faster

<sup>1</sup> See note p. 207.



than man, he rarely does so except in a charge. When disturbed he moves away, but he does not run. In this respect he is similar to the lion, many of whom I have seen walk unconcernedly away in plain sight even when aware of the close proximity of a whole procession of men and motors. But the gorilla is quite different from elephant and buffalo, which, when disturbed flee quickly. Derscheid had only one experience with a running gorilla—that was when he came unexpectedly into the midst of a family of several males with mothers and young and one old male challenged his presence and charged.

Here in the Parc National Albert all wild life is protected. Not only is the gorilla safe from the molestation of man but he shares his sanctuary with the elephant and buffalo and with the smaller mammals and birds. All up and down the mountain side from the edge of the forest above our Rweru camp, we found many elephant trails, broad roadways trampled down both in the bamboo and in the mixed forest. There were numerous places where their tusks had ripped off the bark of the trees and had grooved and polished the hard wood underneath. My husband found on this approach to Mikeno and Karisimbi many more evidences of elephant and buffalo than he had seen in 1921.

When the herd of buffalo had stampeded in front of us on our way from Burunga to Rweru, they left a trail both wide and deep. Such trails were numerous in the lower forest and extended even above treeline. One morning shortly after we reached Kabara a herd of buffalo, traveling from the west, came within two hundred yards of our tents. Surprised by our presence and by the smoke of our camp fires, they stopped short, snorting loudly. Then making only a narrow detour and barely avoiding our natives in their grass huts, they proceeded to our swamp only one hundred yards away to drink. Night after night they came down to the swamp to drink, thus reducing seriously our water supply.

One late afternoon in December, two natives appeared at the door of my tent. They were talking rapidly and were apparently

badly frightened. They brought a letter to me from Burunga. On my questioning them, they told me they had suddenly rounded a turn in the trail two miles below my camp and there had found a large bull buffalo with lowered head, challenging their passage. Terrified they had turned and run away through the forest so fast that they had not looked to see whether there were other buffalo near-by. Although due to return that evening to Burunga, they begged my permission to stay in camp and to receive enough posho for their supper. They wished to travel home only after daybreak when they hoped the buffalo would be feeding away from their trail. High on Karisimbi above treeline, we saw one herd of buffalo grazing on the alpine vegetation. Thus the range of buffalo in the Parc National Albert is at least from seven thousand five hundred or eight thousand feet to approximately thirteen thousand feet.

The leopard is a far less desirable resident of the gorilla forest. In fact, so undesirable is he that by the terms of our mission from the Belgian Government we were authorized to kill a total of five leopards and to take away the skins. During our entire stay in the Kabara camp we heard and saw leopards at frequent intervals. For security Bill cautioned me to tie up my tent each night at the bottom. The wind constantly blowing through a hole near the ridgepole gave me sufficient ventilation. Shortly after I was left alone in the Kivu, I was awakened one night by a crashing in the bushes outside and then came the regular tramp, tramp, tramp, of an animal circling my tent. There was little need to cry out as no one was within earshot. Moreover, to find out how close the animal would come and to listen for what he would do next outweighed any concern for my own safety. The next morning in the mud under my tent lay a leopard's tracks were plainly visible within three feet of my doorway. He had upset my wash basin and had pushed about a chop box containing books and papers.

One evening after dark as Raddatz and I were at dinner in the dining hut, our tent boys came rushing in greatly excited.

As they had been bringing our food from the kitchen, a young leopard had walked right across their path. Although they were carrying a light the animal had taken his time. We went out with them and there, sure enough, we saw the leopard's tracks in the soft ground.

One day I was in the forest making some photographs. With me were my camera boys and as gun boy, the old askari, Thomasi. As we were returning along our muddy trail to camp, Thomasi, in front, stopped short, exclaiming, "*Tui*" (leopard). He pointed to fresh leopard tracks following along in the footprints we had made on our way out and going in the same direction. We followed the animal's tracks all the way home. This leopard had padded *straight through camp in broad daylight*. In fact, so often did we see leopard tracks as we traveled up and down to Leigh's camp that it became a matter of course to say, "Well, the leopard has been up and down the trail again to-day." We always planned to set a trap for him, but we either lacked fresh meat for bait or we were all too busy or too tired when evening came to do it.

Inhabiting the Kivu forest with the gorilla is the little red duiker. His form is small and slender, his color bright rufous chestnut all over, without marks or stripes of any kind except a faintly marked superciliary line. The back of his neck is grayish brown, his chin and throat are whitish, his tail is slender, rufous at base and brown-tipped with white at its extremity. His horns though thick at the base are only three inches in length in the males, while the horns of the female are much smaller. This antelope is a surprising little creature and one you would scarcely expect to find in such an environment. He feeds upon the grass which flourishes among the undergrowth and upon the leaves and shoots of brushwood and small trees. Scrambling about among the shrubs, he has been known to ascend the stems of sloping trees. Every now and then we came upon them as they fed, but usually all we saw was a swift movement in the vegetation as they made a violent rush to safety. They are reputed to have wonderful vitality and power of endurance considering their small size.

For many years, natives have trapped the duiker, craving its flesh for food, so it is not surprising that we rarely saw them in the forest.

Another inhabitant of the Kivu volcanoes is the golden (red) monkey. Kaleidoscopic flashes of lemon and buff among the dark forest shadows revealed to us their whereabouts. Often when we could not see them, their chatter made the forest noisy. Although chimpanzees are undoubtedly indigenous to the Kivu forest, Derscheid located only one group—on the small mountain, Hehu, near the base of Karisimbi.

Many birds of vivid color dart about in the forest. As they fly to and fro their brilliant plumage seems like shafts of red sunlight among the somber trees.

Birds who live so high on these mountains might well be expected to resemble the birds of the north, and certainly we find here doves, ravens, thrushes, titmice, woodpeckers, and even a bird that looks slightly like a song sparrow, but which is more nearly allied to the canary. However, these old volcanoes are so isolated, so widely encompassed by the equatorial zone, that many of the birds are representatives of tropic groups.

Here are various sunbirds. Some are olive green or iridescent blue with red markings on the breast. One sunbird in particular (*Nectarinia johnstoni dartmouthi*) is beautiful indeed. He is large and bluish green and has a long tail and is frequently found feeding among the lobelias. Then there are turacoos, white-starred chats, black bush shrikes, francolins and bulbuls. These familiar and unfamiliar birds live in close proximity, and on a day's journey you will meet some little songster that recalls the woods and fields at home or a bird the like of which you rarely met before.

One bird which came frequently and in great numbers about our Mikenos camp was large and black—about the size of a raven. But the bird which we most frequently saw was a thrush, a little smaller than our American robin, and resembling him in colora-



tion and even in song. Every morning, during a period of several weeks, these pleasing little creatures came hopping about my tent door, scratching about in the dead embers of my fire and picking up any fragments of food which might have been dropped near-by. The male, which seemed the larger bird, has a dusty gray spot under his throat, and either the female or the young has a spotted breast a little less pronounced than that of the wood thrush. Always were they chirping and twittering. Almost, but not quite, did they break into that liquid song we have known and loved since childhood and which has so often awakened us as the dawn touched the hills and meadows of our homeland in early spring. So unafraid were they and so interested in all that I was doing in the forest that I daily came to look for them as for a friend.

One of the most spectacular birds, the turaco, is about a quarter larger than the blue jay and has a longer tail. He appears quite black with a prominent glossy topknot but when he flies he displays brilliant red markings on his wings. A very large bird with a snowy white nape and larger than the American crow came frequently to our swamp for water. After drinking he would fly to a near-by tree where for a long time he remained quite silent, seemingly observing the movements of our safari.

Other frequent visitors to my camp were little slate gray birds smaller than a wren and many pale lemon-yellow birds, smaller than a sparrow and with gray markings on their wings. Twice, I heard owls. My husband remarked about them the first night we were in the Kabara camp and once thereafter I heard them near my tent.

Here as in northern latitudes the birds begin to sing long before the dawn and their songs continue intermittently until after sunset. Remarkable indeed it was to me, even on the foggiest days, to hear them singing as cheerily as if the sun were shining. It seems however that the birds in the high Kivu altitudes are less vocal than our American birds or the birds of Kenya and

Tanganyika. Like all the African birds I heard, their songs are short but nearly all have a silvery, liquid quality. I was always startled by the fervent sweetness of their notes.

The pygmy, doubtless the earliest of primitive peoples in the Kivu forest, dwells on the lower reaches of the volcanoes. The mature pygmy is approximately four and a half feet in height. He is so small that he looks like a ten year old child in contrast with the native Wahutu who are themselves of only average height. Though light in weight, he is sinewy, strong, skillful and very brave. So adept and fearless is he in the use of his light spear that he goes alone into the forest to kill buffalo and elephant. He knows where to strike in a vulnerable spot. He lives entirely on the land, that is, on roots and plants found on the edge of the forest, and by hunting such small game as bush pig and antelope with spear and bow and arrow. For the most part, the pygmies wear no clothing except perhaps a slight loin covering of oil-softened skin. Occasionally the older men display a thick growth of woolly hair, covering the chest.

A tribe of three hundred of these little people dwell in grass huts in the Kivu forest, far removed from the ordinary Kivu natives. Since the pygmy is one of the most interesting of all primitive peoples, it is earnestly hoped that he may never come under the civilizing influence of either the white man or a higher class of blacks. He affords a unique opportunity for scientific investigation. Just as the gorilla should be observed without domesticating him, so should the pygmy be studied without instilling in him a desire for white men's goods and chattels. He should be allowed to remain in his ancestral way of living. Fortunately, under the law of the Parc National Albert, he will be free from molestation and will have with all the other wild life of the park an absolute sanctuary.

## CHAPTER XVIII

### THE MOUNTAIN GORILLA

DUE to the fact that the gorilla is recognized by many as man's closest relative, the study of this ape is perhaps more interesting and more important than the study of any other animal. However, there is no other African beast that has been the center of so many fables and superstitions. Not only are the inaccessibility of the gorilla forests and the persistence of the myths of an imaginative and superstitious people obstacles to those who would separate truth from fiction in our natural history literature, but there is also a tendency to tell and retell a tale which has been well told until that tale is generally believed.

For instance, about the close of the Sixteenth Century, Andrew Battell, an English captive of the Portuguese of Angola, established the idea that the gorilla walked erect, slept in trees and was the terror of natives. For many years subsequent to Battell's writing other writers have insisted that the gorilla was inclined to an erect posture in walking, that he lived in trees and was exceedingly ferocious.

The intrepid little French-American, Paul Du Chaillu, was the first white hunter to kill a gorilla. We have it on good authority that his story was twice rewritten before his editors considered that it had sufficient popular appeal. These stories have done much to perpetuate the first erroneous reports of the gorilla. In spite of their fame as offensive warriors, the gorillas surprised by Du Chaillu fled away from him into the deep forest. The hunters pursued until they were exhausted but 'the alert beasts made good their escape' and the charge of his old male was 'proceeding hesitatingly, step by step,' when Du Chaillu's gun interrupted it.

Had my husband been inclined to accept the traditional view

of the gorilla, the specimens he prepared for his African Hall group might have been much more spectacularly mounted and as a result much more startling in their appeal than is actually the case. In his eyes it was nothing short of a crime to place in an educational institution like the American Museum of Natural History an exhibit that lacked a basis in natural history fact. He had determined that African Hall should contain nothing but the truth. The Gorilla Group to which he devoted much time and attention in the interim between his two Kivu expeditions is the embodiment of the facts revealed by his observations of the gorilla. If the exhibit has disappointed credulous readers of Du Chaillu, it has at the same time satisfied men who have actually seen live gorillas, and prolonged observations by the Akeley-Derscheid Expedition in 1926 have in every detail reënforced this presentation of the Gorilla Group.

The old male of Karisimbi dominates the group. Disturbed by a movement in the bushes below he rises and beats his chest. The other male is shown on all fours in the normal walking attitude. One hand is poised as he hesitates in his advance. His expression is one of passive interest. One old female leans lazily against the base of a tree, while a baby idles near-by. The fifth gorilla, a second mature female, is feeding on the vegetation.

In discussing the experience of his 1921 expedition, which had been all too short to satisfy him, but which had resulted in his belief that the gorilla is a good-tempered animal whose utterance is a prolonged guttural bark rather than a terrifying roar, who touches his knuckles to the ground in walking, and who is scarcely more arboreal in his habits than man, my husband had eagerly anticipated the completion of another important chapter in the natural history record of the gorilla. He was ever mindful of the lack of knowledge concerning this important primate, and of the necessity for more exhaustive scientific investigation.

Although in the past zoölogists have been inclined to divide the genus *Gorilla* into many species, some students even advanc-





DISTRIBUTION OF GORILLA. AFTER HAROLD J. COOLIDGE, JR.



ing the hypothesis that there are several distinct 'races' on the different volcanoes of the Birunga Range, the classification has recently been simplified. An exhaustive study of this subject has been made by Dr. Harold J. Coolidge, Jr., of the Museum of Comparative Zoölogy of Harvard University, who concludes in his recent paper, 'Revision of Genus Gorilla,'<sup>1</sup> that all gorillas may be divided into two species, namely *Gorilla gorilla* (Savage and Wyman), commonly called the Coast Gorilla, and *Gorilla gorilla beringei* (Matschie), commonly called the Mountain Gorilla.

This classification is the result of Coolidge's examination of gorilla material in England, Norway, Germany, Holland, Belgium and the United States and also of the gorilla collecting he did for the Harvard African Expedition, 1927, under the leadership of Dr. R. P. Strong.

Coolidge's paper covers the distribution of the two species of gorilla in detail. The accompanying map which he has sketched for me, is sufficient here to show the general location of the two limited equatorial regions, separated by the forested section of the Upper Congo basin, which the coast gorilla and the mountain gorilla inhabit respectively. He has determined the range of the coast gorilla by plotting in all the places from which skulls that seem reliably labeled have come and by outlining this area. He notes that the gorillas of this western region, although they are conveniently termed 'coast gorillas,' live for the most part at some distance from the Atlantic, that some of them inhabit a mountainous region, and that they seem especially plentiful along the Gaboon, Ogowe, Camp and Sanago Rivers. Since it is the eastern or mountain gorilla with which this chapter is particularly concerned, I quote here Coolidge's delimitation of its range.

"The mountain gorilla is found in a comparatively narrow strip of the Eastern Congo. Its principal habitat is the mountain forest as distinguished from the lowland forest of the Belgian Congo. Its northern limit is Mulu, 0° 10' south, 29° 10' east (Absil and Chapin). We find it as far west as Walikale, 1° 20' south,

<sup>1</sup> Published in the Memoirs of the Museum of Comparative Zoölogy at Harvard University, 1929.

28° 1' east, where it strays a little into the lowland forest. The eastern limit seems to be close to Kigezi in Uganda, 1° 15' south, 29° 45' east. The southern limit is Baraka on Lake Tanganyika, 4° 19', 29° 2' east. In this entire region the gorillas that are most known and accessible are the troops that inhabit the volcano regions where Akeley died while studying them. Whether they are entirely isolated from contact with outside gorillas at the present time is doubtful and has not yet been established.

"In the mountains back of Baraka, Boka, Uvira and Katana large troops have been recently found in the upland forests.

"An interesting problem is open to any one who could devote the time to studying the causes of this surprisingly limited distribution."

In discussing the distribution of the mountain gorilla (*Gorilla gorilla beringei*) Derscheid writes: <sup>1</sup>

"In the volcanoes, to my knowledge, one finds the gorillas on Muhabura (Muharura of authors), Mugahinga, Sebyinyo, on the chain of little craters ending with Bishoke, Karisimbi, Mikenno, and finally Mashahi, a little volcano where I was surprised to find them and which is the extreme western limit of their range. According to the testimony of the Bahumba natives, they were formerly seen on Hehu, but they have been scattered recently. On the other hand, I have found on this same Hehu the unquestionable presence of chimpanzees, the only ones of these animals which are found at the present time in the volcanoes and within the limits of the Parc National Albert.

"On the contrary, from the memory of man, gorillas have never been seen on Nyiragongo and her satellites, on Nyamulagira, nor on any of the little mountains which stretch from north to south between these two peaks and the central group (Mikenno-Karisimbi), on any of the little volcanoes scattered around on the lava plains, or more especially on the plains themselves. Chim-

<sup>1</sup> P. 152. Notes sur les Gorilles des Volcans du Kivu (Parc National Albert: par J. M. Derscheid, Dr. Sc., Extrait des Annales de la Société Royale Zoologique de Belgique, Tome LVIII, 1927).



panzees still existed, we are told, a number of years ago, on the hills of Mushushwe, Batama and Kwahira, to the northwest of Kibumba, but they have been destroyed without doubt by the Bahumba natives.

"Consequently we can consider the east and central massifs of the volcanic chain as the habitat of *Gorilla gorilla beringei*. His absence in the west massif (Nyamlagira-Nyiragongo) where in many places the conditions would be very favorable for him, merits our interest, inasmuch as it is to the west, in the wooded mountains of the escarpment of Lake Edward, near Luofu, that his closest relatives live (the gorillas described recently by Schwarz<sup>1</sup> under the name of *Gorilla gorilla rex-pygmaeorum*,<sup>2</sup> from a beautiful male specimen given me by M. Buxant which I sent to the Museum of the Belgian Congo in 1925).<sup>3</sup>

"I am tempted to attribute this gap in the area of distribution of the volcano gorillas to the fact that the two great western volcanoes are still active. It is very possible that these two mountains have formerly been inhabited by the gorillas who left them at the time of some period of awakening in the volcanic activity. From my own researches it has been sixty-five or seventy years since the last great eruption of Nyamlagira. On the other hand, I myself was present in February and March, 1927, at an acute awakening of Nyiragongo, when the crater was illuminated during the night with a glimmering white light, a phenomenon which had not been observed for a long time. The emission of sulphurous fumes was much more pronounced than is usual. On March 30, 1927, in making the ascent of the principal cone of this volcano, I noted that within a large zone (approximately between 3000 and 3300 meters of altitude on the south-south-east side) the recent emission of poisonous gas had caused the death of nearly all the vegetation. For example, at 3000 meters

<sup>1</sup> Revue Zoologique Africaine, published privately in Brussels by Dr. H. Schouteden, 1926.

<sup>2</sup> In the classification of Coolidge, however, the Lake Edward gorilla is considered a true *Gorilla gorilla beringei*.

<sup>3</sup> A note on the subject of the geographical allotment and the customs of the gorillas of the Ituri will soon be published in the Annales du Comité Belge pour la Protection de la Nature.

one could see that certain kinds of plants, like the ferns, had succumbed while others, notably *Ericaceae* (the heath family of herbs, shrubs or trees) had survived.

"We can suppose consequently that a greater gaseous activity, accompanied or not by the scattering of incandescent lava and the rain of cinders, has formerly caused, if not the death of gorillas, at least their exodus, by destroying the succulent herbaceous plants on the flanks of Nyamlagira and of Nyiragongo, which gave them nourishment, and thus explains their actual absence without having recourse to the hypothesis of a severe eruption. This thesis finds a confirmation in the actual geographic distribution of the bamboos on the volcanic chain."

The mountain gorilla, which for seven weeks was our neighbor in the high Kivu forest of the Parc National Albert, is indeed an impressive animal. Though individuals differ greatly in physiognomy<sup>1</sup> yet the general resemblance between these individuals is always striking. The females and young are almost black. The black coat of the males is relieved by a light colored band extending across the back. This band varies from a dark gray in a comparatively young animal to a beautiful silvery white in the largest and oldest males. Derscheid believes that the denudation of the chest and the protrusive jaws becomes accentuated with advancing age and also that the hood or crest of hair which gives to the gorillas of the volcanoes their characteristic aspect appears relatively late in life.<sup>2</sup> It is obviously much more pronounced in the males than in the females. With advancing age the coat of the males assumes a more grayish aspect generally. Because he lives in cloud-land where during our six weeks' stay the night temperatures frequently fell to 32° F. and the day temperature did not rise above 46° F., and where we had rainfall on all but five of forty-two days, it is understandable that the gorilla finds

<sup>1</sup> See 'In Brightest Africa,' Carl Akeley, Page 244.

<sup>2</sup> P. 152. Notes sur les Gorilles des Volcans du Kivu (Parc National Albert: par J. M. Derscheid, Dr. Sc., Extrait des Annales de la Société Royale Zoologique du Belgique, Tome LVIII, 1927.

his thick hairy coat a very comfortable asset. As to size the males are, as may be expected, much larger than the females. We hear many extravagant accounts of the great weight of the gorilla. Some have been estimated at 450 pounds, others as high as 700, but in each of these cases, the actual height and other measurements of the gorilla have been less than those of the large gorilla which my husband collected and actually weighed in 1921. Here are the measurements and weights:

Height	5 ft. 7½ inches
Weight	380 pounds
Chest	62 inches
Upper arm	18 inches
Reach	97 inches
Calf	15¾ inches

Reference is frequently made to the long arms of the gorilla. It is more accurate to speak of his short legs and spinal column, inasmuch as the greater correlation of arms and chest makes it more logical to compare the arm length with the thorax rather than with the spinal column. A comparison of the arm and chest measurements of man and the gorilla shows that the gorilla's arm is relatively shorter than man's.

Natural histories, encyclopedias and stories of travel have so long pictured the gorilla walking erect that it is little wonder that this misconception of his mode of locomotion is prevalent. My husband saw no indication that gorillas ever walk other than on all fours. Even when they stopped to look back at him, they remained on all fours. He saw gorillas stand erect only in the brief moment recorded in his motion picture film when the female and the young gorilla rose to beat their chests. It is hard to imagine that the gorilla's short weak legs could long support his bulky trunk in an upright position. Moreover, in this mountainous region, where man himself is frequently forced to climb with both

hands and feet, it seems illogical to find an animal that walks like a man.

The great weight of the gorilla's body argues against the hypothesis that he is to any extent a tree dwelling animal. With the aid of the gorilla guide, Mguru, I located the large tree in which my husband had made the motion pictures of gorillas. These gorillas, established in the low forked branches of this tree, were the only ones he saw above the ground. I went through the forest in all directions from this spot where nearly all of the tree trunks were so covered with moss and other vegetation that they would surely carry the marks if gorillas were in the habit of climbing them, but I saw no evidence anywhere that trees had been climbed by gorillas. From these indications it is difficult to believe that these sluggish creatures are any more arboreal than man.

Chest beating in gorillas is apparently not a common action. It seems to denote curiosity or to serve as a warning to the other members of the family. In the experience of our expedition and that of 1921 it has never been coupled with any aggressive act. In fact chest beating was noted only once on each expedition.

In addition to chest beating, 'roaring' is a habit of the gorilla usually cited by those convinced of his ferocity. In discussing these so-called modes of defiance, my husband wrote: <sup>1</sup>

"In my opinion both of these habits have been misinterpreted. The only way I can describe the utterance of a gorilla is as a hoarse, guttural, prolonged bark. It has no resemblance whatever to a roar and there is no resonance in the sound. I doubt if on a perfectly still day it could be heard for more than half a mile. In some cases it is a warning signal to the rest of the band; in others it is an inquiring challenge addressed to the invader of his domain and has some such implication as the words, 'Who are you? What are you doing here?'

"I was keen to see a gorilla beat his chest and was fortunate not only in witnessing this action, but also in making a motion picture record of it. In this motion picture the female is shown

<sup>1</sup> Gorillas—Real and Mythical. *Natural History*, Vol. XXIII, No. 5, p. 437.





*Photo, courtesy American Museum of Natural History.*

THREE OF CARL AKELEY'S MOUNTED GORILLAS IN THE AMERICAN MUSEUM  
OF NATURAL HISTORY.



in the crotch of a leaning tree, to which she had ascended with her two youngsters to get a better view of me. At a time when they were all but indifferent to my presence (although I was in plain sight) she suddenly rose up and beat her chest; then immediately dropped down again. A moment later she was making herself comfortable with the apparent intention of going to sleep if her youngsters would let her. One of the youngsters rose up on his legs two or three times, each time striking his chest once and, as he went down again, hitting the log once or twice with his hands. They made no vocal sounds and I could not hear the beating of the chest from where I stood operating the motion picture camera, a distance of perhaps two hundred feet. There was no wind to carry sound either to or from me. The beating of the chest is a nervous expression of curiosity, the equivalent of which we find in the actions of many of the smaller apes and monkeys, such as their habit of beating the ground or their perch with their hands or feet, while they are perhaps making vocal sounds.

. . . . .

“While I am certain that normally the gorilla is a perfectly amiable, good-natured creature who would not look for trouble, yet I am willing to concede that in regions where he is more or less in competition with the natives for food, and where he is constantly harassed in his efforts to fight hunger, an old male might occasionally become what may be called a ‘bad gorilla.’ No doubt from his standpoint a raid on the native gardens is justified, for so far as he knows the food in these gardens is just as much his as the natives’. Now and then under such conditions a gorilla becomes conscious of his superior strength and may naturally enough grow bold and aggressive. And it is hard to imagine a more formidable opponent than an enraged gorilla. The strength of his arms, as one may judge from the measurements, is tremendous. This strength, backed by the great weight of his short coupled body, would make it useless for an antagonist to struggle against him in a hand-to-hand encounter.”

More than ten times, Derscheid attempted to see how close gorillas would permit him to approach. In each case, the gorillas stood their ground and challenged his advance. When he arrived within ten to twenty yards of them they seemed to resent his intrusion and assumed a threatening attitude. Several times he noticed that the males showed a marked tendency to stand between him and the females and young. In some instances, the females and young withdrew, while the males covered their retreat. He says, "You may stay during one hour within thirty feet of these males without getting them to give ground. They are on the defensive. They seem possessed of a nervous excitement and if you utter a noise they reply. But if you are quiet they only stop and gaze. Their most common method of expressing their feelings is the habit of showing teeth with 'roaring' and not with chest beating. I saw only once a gorilla beating his chest and heard it only twice. Beating the chest is made perhaps either as a warning for the family to be on the alert or probably as an expression of curiosity. It is a deliberate thing."

In all, Derscheid had thirty-three encounters with gorillas. Five of these encounters were with lone adult males, two with couples, and twenty-six with families or bands varying in size from seven to forty-three individuals. In all of these close-range experiences only one gorilla charged. Derscheid provoked the charge when he surprised at very close range a band of males and mothers with young carried on their necks. He had been traveling down the slope of Karisimbi in high unbroken vegetation and had plunged suddenly into the gorilla family, startling them as they fed. The males stood their ground while the mothers and young made good their escape. Then one old male challenged his presence and charged. To stop the gorilla it was necessary for Derscheid to shoot. He merely grazed the gorilla's shoulder when the animal turned immediately and followed the band now well out of range.

There are three occasions, according to Derscheid, when a gorilla may attack:



First, a sleeping gorilla when suddenly awakened at close quarters becomes aggressive. It is easy to come upon a sleeping gorilla without awakening him, a fact indicating that his hearing is not especially acute.

Second, gorillas in a band that includes very small babies carried on their mothers' necks may be aggressive if approached too closely. Then the male, obviously in order to let the female get away with the young, will charge.

Third, if a lone gorilla or even several gorillas are tracked and compelled to travel farther than they wish to go, they may become tired and impatient and finally aggressive. Derscheid disturbed a lone male on the slopes of Mikeno who retreated. Following him, Derscheid again disturbed him while two hundred yards away and forced him to move a second time. These tactics were repeated several times during several hours until at last the gorilla gave unmistakable signs of bad feeling. It is possible that a gorilla so pursued would finally charge.

Once when Derscheid was enroute from his Lake Rukumi camp on Karisimbi to his camp on Bishoke he found in a low valley between the two volcanoes a large area where gorillas had been feeding an hour before. Two hundred yards farther on his guide stopped him because he heard gorillas. He ordered the safari to stop and went forward with the guide. He had progressed fifty paces when he saw gorillas feeding fifty yards ahead. Climbing to higher ground for a better view, he saw a band of more than twenty scattered about a space less than one hundred yards long and feeding on wild celery. He approached to within twenty yards of them and one barked. This band had progressed only about three hundred yards in one hour. It was late in the afternoon and Derscheid, wishing to make camp, returned to his safari. His boys then made a noise to induce the gorillas to let them continue on their way. The gorillas were not frightened but went slowly up one slope of the valley and stopped on a small hill, sixty yards away where they watched the safari pass. Three or four seemed interested in the safari but were not at all alarmed.

Less than a mile away from this little valley Derscheid made camp at Kashidi on Bishoke. Three quarters of an hour later, as he went up a little stream to get water, he found evidence of another band of about fourteen gorillas and saw two males and several others. "*Two days later,*" says Derscheid, "I met the same gorillas *within one hundred yards* of the spot in which I first saw them.

"Then they were making a vocal noise which in its beginning was like a bird song 'hui hui hui hui hui' from *pianissimo* to *forte*, increasing in volume and in pitch. It was very sweet in the beginning and quite different from the guttural bark and other sounds I had heard them make before. Only once again did I hear it. I am quite sure it was a female, probably warning her young ones. The whole band soon went away up the slopes of Bishoke in a light forest—almost a savannah of paper bark trees (*Hagenia abyssinica*)."

During the time the gorillas were climbing obliquely to the higher zone of Bishoke, three big gorillas remained behind as a rear guard. Two of these were males. Derscheid did not get a good view of the third. All three stood their ground for five or ten minutes, until the others were two hundred yards away and quite out of sight and sound. Then they followed, taking the same trail.

When my husband in 1923 advocated to the Belgian Government the desirability of protecting the gorilla, he estimated their number at not more than about one hundred in the Mikenokarisimbi forests. It must be remembered, however, that he was in the gorilla country in 1921 for only three weeks and that in speaking and writing of this animal, he always stressed the fact that his records were incomplete; that he still wished 'to learn the other ninety-five per cent of the gorilla's story.' Mr. Benjamin Burbridge, who spent six weeks in the Birunga Range in 1924, estimated the number of gorillas at two thousand. The evidence gathered by the Akeley-Derscheid Mission during a period of seven months gives us every reason to believe that,

although my husband's estimate is too low, Burbridge's estimate is entirely too high.

Derscheid spent four months in close contact with the gorillas, studying the density of their population in the triangle formed by Mikeno, Bishoke and Karisimbi, in the three valleys descending from this triangle, in the forest on the west slope of Mikeno and around Mashahi, on the north and northeast slopes of Mikeno, and in the valley between Sebyinyo and Mugahinga. He based his census on the number, sex and age of the individuals in the gorilla bands he actually observed, upon the number of nests discovered, and finally upon such traces of their presence as tracks, excrements, and the remains of meals. In his published report <sup>1</sup> he estimated the number of gorillas as follows:

*Belgian part of the Birunga Volcanoes*

Massif central (Mikeno-Karisimbi-Bishoke)—from 350 to 450 gorillas.

Massif oriental (south slopes of Muhabura, Sebyinyo and Mugahinga)—50 to 100 gorillas.

*British part of the Birunga Volcanoes*

Massif oriental (north slopes of Muhabura, Sebyinyo and Mugahinga)—about 100 gorillas.

Total, therefore, for the whole of the area of the habitat of *Gorilla gorilla beringei* (Matschie 1903), from 450 to 650 gorillas.

The estimates concerning the British part of this habitat have as their sources, first, a letter of Mr. Edmund Heller, who has recently hunted the gorilla, and second, the annual report (1925) of the Game Warden of Uganda, published in part in the Journal of the Society for the Preservation of the Fauna of the Empire, July 1927.

Mr. Heller indicates that the bands of gorillas always have more males than females. My personal observations absolutely invalidate his affirmation, which, in my opinion, is based on too limited an experience.

Once I encountered a family of seven gorillas, all adult in appearance,

<sup>1</sup> P. 158. Notes sur les Gorilles des Volcans du Kivu (Parc National Albert) par J. M. Derscheid, Dr. Sc., Extrait des Annales de la Société Royale Zoologique de Belgique, Tome LVIII, 1927.

among whom there were four males. All the other troops observed long enough or near enough to enable me to make a count had perceptibly more females than males. The normal proportion seems to me to be two-thirds females and one-third males. However, it is dangerous to generalize on this subject, for I have seen one troop of a dozen adult individuals which included but a single male.

Usually in the band there are several males appearing to be of the same stature, but I think that the oldest and most formidable male is habitually the chief of the band.

I have been strongly impressed by the astonishingly limited number of young gorillas in the bands which I have observed. Several troops, even including the largest, seemed to be made up entirely of adult individuals. Since, in addition, it is a well established fact that the gorillas are relatively slow in attaining sexual maturity, I am forced to conclude that the species increases very slowly and could make up for any partial destruction of its numbers only with difficulty. In order that the conservation of the gorilla may be assured, it will be well to heed this important point and more especially to issue only a few carefully selected hunting authorizations, even for scientific reasons.

When my husband was studying the gorilla in 1921 he heard of only one case of a native having been killed by a gorilla. I was told a similar story by various natives in 1926. Derscheid, who was able to converse freely with the natives in the Kinyarwanda language, learned the true story, which follows:

Nineteen years ago a native of the Boringo tribe was cutting bamboo. Unaware of the presence of a gorilla sleeping near-by, he awoke the animal by the noise of his ax. This gorilla must have been bad tempered because, with no other provocation, he charged and, seizing the man's neck with one hand and his sacrum with the other, tore him in pieces. The man's head was found quite detached from the body. At Kisola, in British territory, a female in a shamba was killed by natives. Obviously the gorilla wanders from the volcanoes only occasionally and then he raids a shamba to supply his immediate need for food. We have only one or two instances, and those in British territory, of the volcano gorilla going down to the lower altitude out of the bamboo. "In



fact," says Derscheid, "the gorilla of the volcanoes does not interfere in any way with the natives; nor until the present time have the natives interfered with the gorillas."

There are no natives—not even pygmies—living in the true gorilla forests. However, the natives often climb up to the gorilla forest to get honey, to trap birds and hyrax, and to cut firewood. In the lower part of the bamboo zone where gorillas are not plentiful, they dig pits to trap wart hog or buffalo. There is no record that a gorilla has ever been trapped by natives. In the higher altitudes, they cannot dig trap pits because of the lava, but as high as Rweru on the upper edge of the bamboos, they fell hollow trees for honey. On these occasions it may easily happen that they find themselves in the midst of a gorilla band or unwillingly disturb a sleeping gorilla.

The Kivu pygmies who hunt in the gorilla forest never use a trap. They use only spears and bows and arrows. They will not touch or eat the flesh of a gorilla or chimpanzee. Notwithstanding their great courage, they avoid the gorillas, since contact with the great apes may prove dangerous and can be of no advantage to them. Several pygmies whom Derscheid met told him that they had never seen a live gorilla and that they knew of the animal only by hearing stories from their tribesmen. Other pygmies, familiar with gorillas, stated that it is unwise to climb a tree in face of a charging gorilla because of the likelihood of being trapped. They told him not to go into a dense thicket in case of danger, as there the gorillas move easily and pay no attention to thorns.

Usually when a native disturbs a gorilla, thereby provoking a charge, the native is warned by the 'bark' of the gorilla. Since only a single gorilla charges, a native if aware of what is happening is able to protect himself. The method seems to be always the same. The gorilla, running but not leaping, is stopped in his charge by a spear which the native holds near the ground with its blunt end thrust into the earth at a narrow angle. Conflicts between natives and gorillas are difficult to study, because the na-

tives, realizing now that the white men wish to protect the gorillas, are afraid to give information. They fear being jailed if it is known that they have ever killed a gorilla. Only the pygmies freely admit the truth in such matters.

It is significant in this connection that the natives of the region have no fear of the gorilla. Some of my husband's guides and his gunbearer in 1921 were trappers and hunters in the gorilla forests and were thoroughly familiar with the animals. Even when very close to gorillas, the guide showed nothing more than a casual interest. This was in marked contrast to his natives on the elephant trail who were always terrified if they found themselves unprotected by his gun and when in danger dropped behind ready for a retreat. The gun boy on the gorilla hunt handed him his gun as the party approached a gorilla band and then proceeded ahead of him unarmed to clear the nettles from the path. While the gun was being fired the boy dropped prone on the ground between gun and gorilla, obviously unafraid.

The testimony of Mguru, who had also served as gorilla guide for Mr. Burbidge, Mr. Barns and several other white visitors to the Kivu, seems to me pertinent to this discussion. His replies to my questions were interpreted by Bill, and given in the presence of Raddatz and myself at Camp Kabara. I quote them in the form of a questionnaire with answers.

How long have you, Mguru, been a guide?

Since long before the War.

How long have you known the volcanoes?

Since long before the white man came to hunt.

Why did you come up to the Karisimbi, Mikenno, and Bishoke forests?

I came to trap duiker and to hunt hyrax with dogs.

Did you see gorillas then when trapping?

Yes, many, before white men began to shoot—often twenty or thirty in one place and in one family.

How did these gorillas behave then?

Some lay in beds. Sometimes I saw ten and twenty lying in beds. Never, never run away from me. Only looked at me long, long time.

How close did you go to them?

As close as fifteen feet when I came on them in the deep vegetation suddenly.

Did you ever hear gorillas make a noise?

Yes, at daybreak, they make a trumpet noise, a little like an elephant, but not so big. You could hear it one half mile. Then one other noise, not as big as a lion, but like a drum. (Here he gave an imitation of each noise, the former high pitched, the latter, low and guttural.)

Did you ever see gorillas beat their chests?

Yes, often, when they got my wind.

How small a gorilla have you ever seen?

Very small—so long (measuring fifteen inches) riding upon its mother's neck.

Did you ever see a gorilla attack or kill a man?

No, I never saw one, but I heard of one, who killed a man Bzaz who came up on east of Mikenno by a banana grove to cut bamboo. He never came back to shamba and other natives went to look for him and found him all trampled on and many gorilla tracks all around his body. (This is similar to the story Mr. Akeley heard and is apparently the traditional story of this region.)

Did a gorilla ever charge you while hunting or trapping?

No.

Have you hunted gorilla with many white men?

Twice before Mr. Akeley came in 1921 and five times since.

I caught with my own hands one of the little gorillas taken by Burbridge.

Did you ever see gorillas in a tree?

Only once in all my hunting experience, and that was with Mr. Akeley in 1921, when he took his motion pictures of them. (He here described exactly as Mr. Akeley describes and as his film shows, the position and action of the gorillas.)

Have you ever seen a gorilla in a tree since?

Never, but that one time.

Have you even seen a gorilla nest in a tree?

No. I have seen many chimpanzee nests in trees but never a gorilla nest.

He then related the story of my husband's gorilla hunting, and told the details of where and how he shot and skinned them—in very steep places, of how the old gorilla almost rolled over them, telling all details with exactness. When I remarked on this he said, "Why, of course, I tell the truth, I tell things just as I see them."

Nearly all of these questions were asked at least *twice under different conditions* and his answers were *invariably the same*.

Leopards, which are very numerous in the Kivu volcanoes, are said to attack young gorillas. Because of their depredations upon the gorilla, the Belgian Government encourages the killing of leopards in the Parc National Albert. With this single exception, the great ape who journeys without haste over the Birunga slopes has no enemies in the animal world. Herds of elephant and buffalo travel the same mountain trails as the gorilla, and feed side by side with them and, according to the natives as well as from our own observations, there is peace between them.



## CHAPTER XIX

### THE PARC NATIONAL ALBERT

IN January, 1922, while homeward bound on the Red Sea, my husband's idea of a gorilla sanctuary took definite shape. He wrote to Judge Paul Salkin, Elisabethville, Katanga, Belgian Congo, that he had found the gorilla 'a wholly acceptable citizen and not the wicked villain of popular belief'; that he is 'a splendid animal in every sense, in no sense aggressive or inclined to look for trouble.' He also said that in the securing of 'the largest male, a magnificent creature weighing three hundred and eighty pounds, both Mrs. Bradley and Miss Miller were present and like all of the others he showed only a disposition to get out of danger.' He also stated that he was 'communicating with the authorities at Brussels in this behalf to establish a sanctuary for the gorillas of the Kivu country where they may have protection for all time.' He then added: "If this is not done very soon they are in positive danger of being exterminated. I do not think it is fair to future generations to exterminate an animal of such intense human interest as the gorilla. He is harmless; the natives of the region have no fear of him and he in no way interferes with them. He occupies a region that will never be available for agriculture or other human uses more than to supply forest products such as bamboo and fire wood, and the native privileges need not be curtailed by converting a great tract of primitive country into a gorilla reserve. I not only want to establish a sanctuary but also a Biological Survey Station where students of animal psychology and kindred subjects may carry on their research work under most advantageous conditions."

On January 18, 1923, he compiled various suggestions regarding the establishing of a sanctuary for the gorillas and submitted these to his esteemed friend, Dr. John C. Merriam, of the Car-

negie Institution, Washington, dean of ardent conservationists and promoter of scientific research. He called attention to the fact that the number of gorillas in the Kivu region is small, which seems strange since so far as we know they have no enemy but man and the natives do not molest them; that they were healthy; that they were not wild, as was shown when three of them ran onto a leaning tree one hundred and fifty feet away to get a better view of him and were apparently unconcerned, though he was in full view operating a motion picture camera. He recalled the fact that, even with one of their number shot, they moved away only a short distance where they were easily approached again, and stated that obviously it would be a very easy matter to exterminate this colony.

He suggested the setting aside as an absolute sanctuary an area approximately ten miles square, where, when undisturbed, they would soon have complete confidence in man and would doubtless afford opportunity for observation and study at close range; and also that the area should be bounded by a native-police-patrolled roadway, a 'dead line,' within which the 'gorillas would soon learn that they were safe and beyond it in danger' and that there would be 'no difficulty in keeping them within the sanctuary unless it became over-populated.'

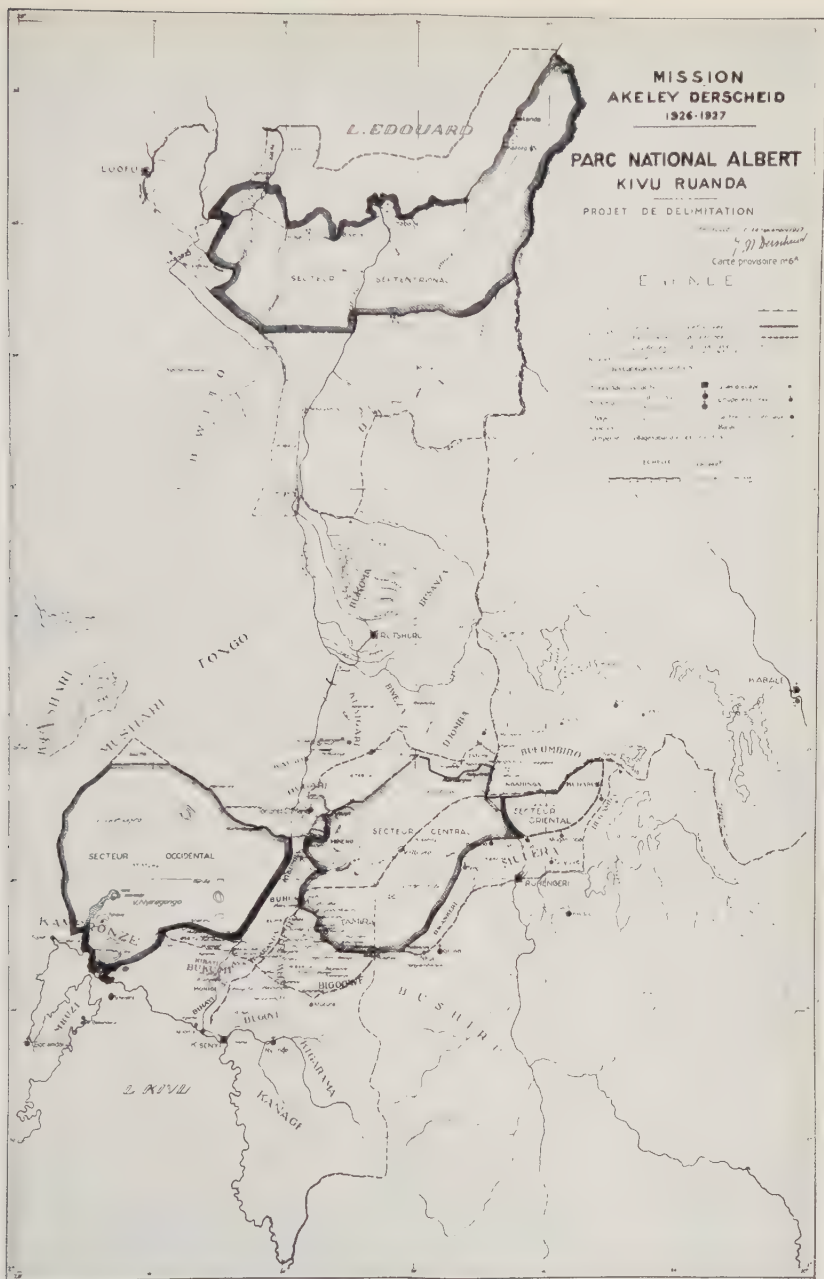
"In coöperation with the Belgian Government," he wrote, "I desire to see an organization established which shall undertake to make provision for its care and maintenance; to establish and maintain a scientific research station with residence and laboratory facilities at an altitude of approximately six thousand feet where the climate is suitable for the continued residence of Europeans. One resident white superintendent would be required to be in charge of the station and to oversee patrol and maintenance. I wish to emphasize the importance of making this region an *absolute sanctuary*! Sanctuary is not sanctuary unless *absolute*."

Dr. Merriam immediately turned over this statement and map with his strong recommendation of the gorilla sanctuary plan to Baron Emile de Cartier de Marchienne, then Belgian Ambassador









LIMITS OF PARC NATIONAL ALBERT ESTABLISHED IN 1929 AS SUGGESTED BY THE AKELEY-DERSCHIED MISSION OF 1926-27.



to the United States. To accompany it, Dr. Merriam also submitted a statement covering the organization, history and method of establishing the national parks, monuments and bird refuges in America. Several months before, the Belgian Ambassador had become interested in the results of the gorilla expedition and the plan of conservation through a lecture which my husband had given in Washington in the spring of 1922 and also on the occasion of a luncheon at the Belgian Embassy in December of that year. Accordingly, early in 1924, the Ambassador began active efforts with his home government to the end that not only the small area of the reservation be secured but that a larger outlying tract of land be set aside as additional protection to the gorilla. Seconding the efforts of Baron de Cartier with unremitting devotion, was the Belgian Consul-General at Baltimore, Mr. James Gustavus Whiteley, whose helpful interest for more than twenty years had furthered the scientific expeditions sent by the American Museum of Natural History to the Congo.

Among American organizations interested in the project were the Camp Fire Club of Michigan and the New York Zoölogical Society both of whom in resolutions to Baron de Cartier expressed keen interest in the undertaking. The Department of the Interior of the United States also voiced its interest in a memorandum to the press.

On March 2, 1925, His Majesty, Albert, King of the Belgians, created by Royal Decree the Parc National Albert, Kivu District, Belgian Congo. A letter from His Excellency, Baron de Cartier to Dr. Merriam, President of Carnegie Institution and Vice-president of the National Academy of Sciences, supplies the historical development of the Park at this point.

The advance of civilization into Central Africa has brought with it its inevitably attendant menace to primitive forms of wild life. This National Park has therefore been laid off, under the auspices of His Majesty King Albert, as a sanctuary where both animals and plants and natural scenery may be preserved and where scientists from all over the

world may eventually come to study the flora and fauna of Africa in their original and natural surroundings.

During the past few years there has been an ever-increasing influx of big game hunters and natural scientists into the Belgian Colony which is the last refuge of many rare species of African fauna. The Belgian Government has recognized the necessity of permitting a certain number of such rare animals to be taken for scientific purposes, but has consistently endeavored to preserve these rare species and also to prevent the wanton destruction of other less rare, but harmless, animals, whose slaughter serves no useful purpose.

In these circumstances the Belgian Colonial Authorities have found it necessary to restrict not only private hunting expeditions but also similar expeditions contemplated by many of the most distinguished museums of natural history and other scientific bodies.

Among the rare animals which are in danger of extinction is the Gorilla—an animal of extreme interest to scientists. The Belgian Government has, in the past, felt it its duty to permit a few specimens to be killed or captured for strictly scientific purposes, but the time has come when, in the interests of humanity, as well as in the interests of Science itself, steps must be taken to preserve the remaining gorillas from extermination.

The reservation embraces the three volcanoes, Mt. Mikenno, Mt. Kari-simbi and Mt. Bishoke.

. . . . .

In this Parc National Albert it is planned to erect a laboratory for biological studies where scientists from all parts of the world may eventually come and study the flora and fauna of the Belgian Congo as well as the geological and meteorological conditions.

In inaugurating this new experiment—the first of its kind in Central Africa—the King and his officials have studied the great American reservations and national parks and have sought the advice of eminent American scientists.

In order that the best results may be achieved it is hoped that this humanitarian and scientific project may receive the sympathetic co-operation of the members of the National Academy of Sciences, and the benefit of their experience and wise counsel.



This letter was presented at the meeting of the National Academy of Sciences, in Washington on April 29, which passed the following significant resolution:

The National Academy of Sciences desires to express its gratification at the action of His Majesty, the King of the Belgians, in the establishment of the Albert National Park for the effective preservation of the Gorilla and other animals, together with the protection of the flora of the region; and assures His Majesty of its deep interest and its disposition to coöperate in the realization of the benefits to science and mankind arising from this wise and generous action.

My husband's enthusiasm for the consummation of his dream and his appreciation of the action of His Majesty, the King, and the efforts of Baron de Cartier are voiced in the following letter to the Belgian Ambassador:

May I offer to you hearty congratulations on the successful result of your work in connection with the campaign for the protection of the gorillas of the Kivu? May the Parc National Albert continue indefinitely to the honor of His Majesty, King Albert, and his Ministers, who have been instrumental in establishing this splendid wild life sanctuary.

Of course the killing of a reasonable number of specimens for scientific institutions is legitimate and necessary, but the indiscriminate killing by sportsmen and others is unpardonable. Killing gorillas cannot possibly be considered sport; the animals are easily located with the help of native guides in the regions they inhabit, easily approached and easily killed. They are not wild in the sense that most hunted animals are wild.

They are not great wanderers. They are reluctant to leave the region in which they live, so it is possible, by following a band or a single animal, to come within shooting distance a number of times in one day.

Unfortunately there is a large class of men who, for one reason or another, are constantly seeking excuses for killing. The gorilla, because of his unjust reputation for vicious ferocity, makes a strong appeal to the would-be hero type of sportsman, and the gorilla is menaced by the

'white hunter' who would exploit him in catering to these 'sportsmen' and for his own financial benefit.

In the *African World* (London) of October 1st, 1924, there appeared a letter from T. Alexander Barns, F.R.G.S., in which he says in relation to numerous letters that had appeared in the *London Times* and other publications *in re* the possible extermination of the gorilla:

'It seems to me that the whole trouble arose from Mr. Carl Akeley's misstatements about the *remnants* of the stock of gorillas on the Kivu Volcanoes not numbering more than fifty to one hundred. This is nonsense, as the French missionaries (Les Pères Blancs) who live in the vicinity will tell any one who cares to write to them on the subject (address, Lulenga, Kivu). They can certainly be numbered in thousands, and Mr. Akeley has been making a mountain out of a molehill in his campaign for the preservation of gorillas. He has advocated a reserve on the Central Birunga Volcanoes, which has now been made, and is a sound scheme, as one of the main roads from Kivu to Lake Edward passes by there. But allow me to quote from my recent article in *The African World*:—

As the result of our researches, we have quite established the fact that what we may call the Central African gorilla can no longer be considered as a rare animal. They are exceedingly numerous over a huge extent of country that takes in not only the mountain forests northwest of Tanganyika and west of the Rusisi Valley, but the greater part of the Lowa district west of Kivu as well, and probably extends right away to the east bank of the Upper Congo River, where a gorilla was shot as long ago as 1883. Then, again, they are to be found on the high mountains close to the west shore of Lake Kivu, besides those on the Birunga Volcanoes to the northeast of the lake. I am quite in agreement with the Belgian Government in making a sanctuary for these animals in the latter area, but entirely to forbid shooting them throughout the Eastern Congo is quite an unnecessary restriction. I will even go so far as to suggest that one or two gorillas be allowed to be shot on the 2000 f. (now advanced to 3000 f.) license already in force, which would induce many sportsmen to visit the country.'

It is quite possible that there are more than one hundred gorillas in the forests of the three mountains now included in the Parc National

Albert. *I hope there are more than one hundred*, but I doubt it. The statement that they can be numbered in thousands is absurd. I do not know what the French missionaries at Lulenga would say about it, nor would I care much, for although these missionaries have lived at the base of Mikeno for many years, and have supplied native guides to most of the men who have shot gorillas there, only one of the three whom I met in 1921 had ever seen a live gorilla, according to their own statements. It is well known that the gorilla occurs to the west of the Rusizi Valley and Lake Kivu. Last year (1924) Mr. Barns acted as guide to Mr. Alfred Collins of Philadelphia, who was accompanied by Mr. Heller of the Field Museum of Chicago. They had permission to shoot two gorillas for that institution. They were not permitted to hunt on the Kivu volcanoes, consequently they went to Walikale, west of Lake Kivu. Mr. Barns reported that there were 'thousands' of gorillas in that region. I wonder on what he based this statement, for we have it on best authority that, after some hunting there, Mr. Barns decided that the game was not worth the candle and gave it up. Collins and Heller continued and succeeded in killing two specimens, the only ones they saw, and these two dead gorillas were the only ones seen by Mr. Barns! Still he says there are 'thousands' of gorillas there and recommends that the Belgian Government allow *one or two on each sportsman's license!* Mr. Barns is now circularizing England and America, seeking patrons for the 'Alexander Barns Adventure Tours' in the Kivu and other regions of Equatorial Africa, and one of the inducements he offers is the gorilla.

It is possible that we 'alarmists' who are interested in preventing the destruction of the gorilla have overstated our case—in fact, I hope we have. The point of paramount importance is that we 'play safe,' and that is the thing that is accomplished through the establishment of the Parc National Albert. If in the future it is found that there are, for any reason, too many gorillas, it will be very simple to reduce their numbers; while, on the other hand, if we were some day suddenly brought face to face with the fact that the last gorilla had been killed, it would be a very different story.

I earnestly hope that the plan for a research station within the Parc National Albert may be brought to realization. Such a station, affording living and laboratory facilities for investigators desiring to study the fauna of the region, would seem to promise gratifying results. This station would be under the management and control of the proposed

society (as already discussed), the membership of which would be made up of scientific and educational institutions.

My husband was greatly pleased at the thought of a possible enlargement of the Park. On June sixth he again wrote to Baron de Cartier—in reply to his request for suggestions in relation to the inclusion of a larger area than originally proposed in the Parc National Albert that there is 'much of this region that might well be included—the southern end of Lake Edward with its wonderful herds of hippopotami; the Ruindi plains with their lions and their great herds of antelope of several species; the forests of the Ruindi valley—the haunt of elephant and buffalo—not much more than a graveyard now, but the game would come back if given sanctuary there; the slopes of the volcanoes Nyamlagira and Nyiragongo, of little use except as a reserve for game and for its scenic interest; Lake Bulera, to the east of the Parc—one of the most beautiful of all the small lakes of the region. All these are worthy of being included in the Parc National Albert.'

To Baron de Cartier on the same day he also wrote asking for permission to return to the Belgian Congo to obtain the accessories and painted background <sup>1</sup> for his Gorilla Group and stating that he had delayed asking permission to do this work pending the establishment of the Gorilla Sanctuary. On this expedition he wished to take with him two scientists, one of whom should be a Belgian to carry on preliminary studies of the live gorilla.

"I have definite, and I trust good, reasons for wishing to be of the party making the *initial studies* of the gorilla when first approached by man as a friend instead of as an enemy," he wrote. "It is of great importance that these first observations be carefully made and recorded; that the process of 'taming' and making the acquaintance of them be done intelligently, taking every precaution against accidents such as might result in injury to one

<sup>1</sup> In 1921 the Officials of the Belgian Government kindly gave my husband permission to obtain ten gorillas. He took only five, feeling that this number of specimens was ample for a group that would tell a true story of the gorilla.



of the party or unnecessary shooting of a gorilla because of injudicious approach."

In February, 1926, in Brussels while en route to Africa, we were entrusted with the Mission to the Kivu, which, as previously stated, empowered us to execute a general survey of the National Park; to fix on the map native villages, position of forests, bare rocky country, grass lands, cultivated land and pasture, and areas inhabited by gorillas and chimpanzees; to estimate the number of these animals; to study methods of preservation of the fauna, especially the gorillas; and to select suitable sites favorably located and naturally endowed for laboratories and residences for park conservators and visiting scientists.

In April, 1927, President Henry Fairfield Osborn, who from the beginning was in warm sympathy with the idea of gorilla protection and keenly interested in this rare spot so rich in its possibilities for scientific investigation, received from the Belgian Government a letter inviting the American Museum of Natural History to participate in plans for scientific development and research in the Kivu region. To this he replied that the 'American Museum is keenly interested in this great movement for the conservation of the native flora and fauna of the Parc National Albert, a project which was so dear to the heart of Mr. Akeley, and all true nature lovers will forever be indebted to His Majesty, King Albert for his broad-mindedness and wisdom in establishing this sanctuary.'

In further response, a unanimous resolution of the Trustees of the American Museum of Natural History expressed their appreciation of the action of His Majesty and their willingness to coöperate in carrying out plans for scientific development of research in this area.

It was in June, 1927, that Derscheid returned to Belgium, and during a year of military service, prepared an initial report on his gorilla findings and also did yeoman service in the correcting and amplifying of the maps of the region between Lake Kivu and Lake Edward. In September and October, 1928, I spent four

weeks in the home of Derscheid and during that time we collaborated on the preparation of the First Memorandum concerning the Parc National Albert for the Belgian Government.

Our memorandum proposed that the limits of the Park be extended to include the arid active volcanoes of Nyamlagira and Nyiragongo, which are of geologic, volcanologic, meteorologic, and seismologic importance, and also the swamp and sandy lands along the south shore of Lake Edward and the Rutshuru River, in and about which are large herds of hippo and a fair number of antelope. It was further proposed that certain outlying regions of the park be contracted in order to exclude native villages and arable land. Such arrangement would increase the area from 24,000 hectares (the original area set aside) to 200,000 hectares (500,000 acres).

An important section from our plan follows:

The idea of establishing national parks in Belgian Territory was first conceived by His Majesty, the King of the Belgians, during his journey through the national parks of the United States in 1919. He recognized at once that similar Belgian parks should be located, not in the densely populated areas of the mother country, but in the vast wilderness of the Belgian Congo. This idea for the first time took definite shape after the proposition made by the late Carl Akeley following his expedition to the volcanic region of Northern Kivu in 1921; which proposal was sanctioned by Royal Decree in 1925.

We consider the Parc National Albert a Royal Institution, remembering that His Majesty has shown the deepest interest from its creation to the present time. The first words of the Royal Decree give us the essential character and the true meaning of such an undertaking: 'Le Parc est créé *dans un but scientifique*.' Since the promotion of science is the definite and final goal, not only for to-day but also for the benefit of future generations, we wish to emphasize most strongly the necessity of preserving in the park all wild and natural conditions as they now exist.

The richness and exceptional variety of flora and fauna of this region, its extraordinary geological and geographic interest as well as an almost

unique opportunity of saving some of the primitive African pygmies, a race now threatened by extinction, are the chief reasons for demanding that this area should remain inviolate.

Furthermore, on account of the different altitudes—ranging from 2500 feet to more than 14,000 feet—nearly all kinds of vegetation, from the palm-fringed equatorial rivers to the flower-filled alpine meadows under the snow-capped peaks, are to be found, with a corresponding variety of animal life, thus affording a wonderful opportunity for endless scientific investigation in a rather small area of comparatively easy access. In the proposed area half is mountainous, the other half consists of the sand and swamp lands of Lake Edward.

It is believed also that the region is of practically no economic value, which eliminates conflict between the material development of the country and the interests of science. Furthermore, except for the pygmies who should be left undisturbed in their ancestral way of living because they are few and of slight menace to any living species, the areas are uninhabited.

The memorandum further included questions of ownership, native rights, jurisdiction, et cetera.

As a final matter, the question of scientific research is dealt with. It provides for 'a central station at Rutshuru for the administration of the park and to serve as a permanent base for scientific research; for the use of certain vacant colonial buildings as a warden's office and domicile and for the construction of others for the essential use of scientists and desirable visitors. Well equipped laboratories, an adequate scientific library, a small local study museum of geological, botanical and zoölogical collections should be established in order to facilitate research.'

It suggests also that 'small ranger stations be located in places of strategic importance and rich in opportunity for accomplishing a serious survey of the Park, the first being located on the middle slopes of the north side of Mount Karisimbi on the shore of the small Lake Rukumi, discovered by Derscheid in 1926 near treeline. This pond is above the region of heavy cloud and

abounds in the most interesting animal species—gorilla, buffalo, elephant, leopard, hyrax, antelope, squirrel, sunbirds, plaintain eaters, et cetera.'

In conclusion, the memorandum states that 'in view of the determination of the Belgian Government to support the park, which is a region of international scientific importance, and because it seems wise to secure competent direction by men perfectly aware of the needs of scientific research and nature conservation and who have had experience in such matters, it appears wholly desirable to place the management of the park in the hands of a Belgian scientific institution which is so favorably situated as to obtain financial and scientific help both in Belgium and in foreign countries.'

This memorandum approved by His Highness, Prince Albert de Ligne and His Excellency, Baron de Cartier was submitted to His Majesty, Albert, King of the Belgians, on October 8, 1928, by Prince Albert de Ligne. The following evening His Majesty and Their Royal Highnesses, the Duke and Duchess of Brabant, received in the Palace at Brussels the Belgian Ambassador to the United States and Princess de Ligne, the American Ambassador to Belgium and Mrs. Hugh Gibson, the Prime Minister and Minister of the Colonies, M. Henri Jaspar, and Mme. Jaspar, M. and Mme. Franqui, and other friends of science as well as Dr. and Mme. Derscheid and myself. There throughout a long and intensely interesting evening the project of the park was discussed.

On my way home from Africa in 1927, I had been requested by the King to go to Brussels where on His Majesty's birthday I had been received for the second time at the Royal Palace. In accordance with my husband's plan I had then presented to His Majesty one of Leigh's paintings of the Parc National Albert and at the Royal request had given a verbal report of our expedition. Now Derscheid gave an account of the findings of the Akeley-Derscheid Expedition and projected photographs of the Kivu. I had taken with me to Brussels the gorilla film which my husband



had made in the Kivu, and this we showed to His Majesty and Their Highnesses.

A few days after our evening at the Palace in Brussels Derscheid and I described the gorilla country, the plans for conservation, and also our scheme for scientific research therein before the Society for the Preservation of the Fauna of the Empire at the Zoölogical Society in London. At the December meeting of this society Baron de Cartier introduced my husband's gorilla film and Derscheid again spoke, both expressing the earnest hope that the British Government may make absolute sanctuary of the Uganda side of the gorilla volcanoes.

Inasmuch as the boundary between the Belgian and British volcanoes is not an impassable natural barrier it is easy for gorillas to range from one side to the other as they undoubtedly do. To have complete protection on the British side would be an unquestionable guarantee that the Belgian gorillas would have absolute sanctuary. Mr. C. W. Hobley, acting as Secretary of the Society for the Preservation of the Fauna of the Empire wrote me on June 20, 1929, that the society had this matter in hand and had communicated with the Colonial Office in London which had written to the Governor of Uganda to ascertain his views. Mr. Hobley also informed me that the Zoölogical Society of London was supporting the proposal and had taken the matter up independently with the Government.

The Kruger National Park, located in the northeastern part of Transvaal Province of the Union of South Africa and established the year following the Parc National Albert, is the second national park in Africa. They are the very first links on the chain of nature sanctuaries in Africa. Most earnestly do we hope in time to see this chain extended throughout all Africa, binding the nations together more strongly for the preservation of the most valuable regions for scientific research.

Throughout the fall and winter months of 1928-29 Prince Albert de Ligne has been untiring in his efforts to push to a completion the satisfactory organization of the Park to the end that

scientific work be begun and also that the always necessary financial support be secured. Likewise Dr. John C. Merriman, in a letter to me on March 30, 1929, expressed his continued interest—"The Parc National Albert project is to me one of the most interesting and important plans of this nature being studied in the world at the present time and I am extremely desirous of seeing it reach the very high level of effectiveness which I know is desired by all concerned."

As an outgrowth of this keen interest, in the late spring of 1929 a joint expedition to the Parc National Albert was proposed by the Carnegie Institution and Yale University. Permission for the undertaking was received from the Belgian Government through Prince de Ligne. The expedition started for Africa in June, under the direction of Dr. Harold C. Bingham, associate of Dr. Robert M. Yerkes in the Institute of Psychology at Yale, to conduct a psychological investigation of the habits and behavior of the mountain gorilla in the Kivu sanctuary.

Another expedition, sent out jointly by Columbia University and the American Museum of Natural History for scientific investigation in both the Belgian and French Congo, entered Africa in July, 1929. It is in charge of Henry C. Raven, Associate Curator of the Department of Comparative Anatomy in the American Museum. The other members are Dr. William K. Gregory, Professor of Vertebrate Paleontology at Columbia University and author of works bearing on the evolution of man, Dr. J. H. McGregor, Professor of Zoölogy at Columbia University and an authority on the anatomy of the anthropoid ape and man, and Dr. E. T. Engle of the Department of Anatomy at the College of Physicians and Surgeons, Columbia University, specialist in endocrinology and physiology. Their object is to trace the source of functional disorders, common to both gorilla and man, with a view to alleviating the sufferings of man. These scientists also expect to visit the Parc National Albert to observe the gorilla in his wild state and to study the gorilla's relationship to man. That the

findings of both expeditions will be of rare significance is without question.

So far as true conservation is concerned the institution of game reserves in Africa is only a temporary makeshift. Only until the recent increased population of the country have they served a valuable purpose. The objections to them are that they are not perpetual, and therefore they may easily be encroached upon and possibly abolished by agricultural interests; that there is no feasible method of enforcing the laws therein; and that when forage is short there is no way of preventing the game from leaving the reserve and traveling for food to unprotected lands or to private estates. There they may easily fall victims to the gun of sportsman or settler. In the 1928-29 plan of organization of the Parc National Albert the game reserve as such is abolished because we believe that there is only one way to protect rare and interesting animals and that is to have them in a territory properly administered as a wild life sanctuary for all time and which territory in no way runs counter to the economic development of the country.

As a crowning achievement now as this book goes to press is the consummating chapter in the history of the organization of the Parc National Albert. The Royal Decree signed May 6, 1929 was confirmed by the Colonial Council and re-confirmed by King Albert in June, 1929. *King Albert has by this act created a corporate body in the Belgian Congo and in the mandated territory of Ruanda-Urundi for preservation of fauna and for strictly scientific purposes.*

The park has been greatly enlarged and now consists of five hundred thousand acres and comprises four Reserves, or Sectors, lying in the Kivu District, in proximity to each other. Within these Reserves it is forbidden, under penalty or penal servitude or fine, or both, (1) *to pursue, capture, kill, or molest in any way, any kind of wild animal, including animals which are reputed dangerous or harmful*, (2) to take or destroy the eggs or

nests of wild birds, (3) to cut down, destroy or remove any uncultivated plant, or (4) to make any excavation, embankment, boring, or any operation of a nature to change the aspect of the ground or of the vegetation.

Unless provided with a special permit, no one (except officials and others properly qualified) may enter the Parc National Albert, or circulate, camp or sojourn therein, or introduce dogs, traps, or fire-arms, or possess or transport or export skins or other parts of wild animals or uncultivated vegetable products.

As the four Reserves, or Sectors, of the Parc National Albert include certain tracts of land now occupied by natives or previously granted to private persons or companies, provision is made for the expropriation of these tracts, if found proper and desirable, and it is further provided that even on these tracts under private or native occupation, *the destruction, capture or pursuit of the gorilla, as well as all forms of hunting this animal, are absolutely forbidden.*

To the four Reserves, or Sectors, of the park proper, there are added certain adjacent territories, under less severe restrictions, to serve as protecting zones to the Reserves. These protective zones are sparsely inhabited by natives. In these zones, hunting, fishing and cutting down trees, are prohibited except that the few natives now living there will be permitted to exercise their customary rights which they now enjoy but only with the primitive weapons which they now employ.

The Belgian Colonial Government undertakes to create and maintain, at its own expense, a corps of conservators and a corps of native police, and to pay the strictly administrative expenses of the park. The Parc National Albert is to be administered by a Commissioner (*Commission du Parc National Albert*) and by a Committee of Direction.

The *Commission du Parc National Albert* will consist of not less than eighteen members; one-third, including the President, to be appointed by the King; another third to be selected by the King from nominations made by Belgian scientific institutions; and an-



other third to be chosen from among members of foreign scientific institutions.<sup>1</sup> In addition to its administrative functions, the Commission is authorized, subject to the approval of the King, to accept gifts, legacies and other donations which may be contributed to further the scientific purposes of the Parc National Albert.

This act of the Belgian Government stands as an epochal opportunity for science. Both broad mindedness and liberality are shown in their willingness to have foreign scientists share in the administering board. This act points to that long-hoped-for internationalism in conservation and in science and to a widening interest in protection throughout all Africa.

<sup>1</sup> Professor Henry Fairfield Osborn of the American Museum of Natural History and Dr. John C. Merriam of the Carnegie Institution have been appointed members of this Commission.

## CHAPTER XX

### THE WEARY HOMEWARD WAY

It was the nineteenth of December and the Congo expedition was finished. As we began our long homeward trek the imperative 'to-day' was still confronting us. For six weeks the struggle to complete my husband's work had gone on and with it the larger combat both day and night with hours of loneliness and anguish. Surely, only the grace of God strengthened me to go on then and during the succeeding months, and with that the undeniable conviction that in every undertaking and crisis my husband's spirit supported and uplifted me and became my rod and staff. That beautiful psalm which I had been impelled to read at my husband's burial service and which I knew symbolized the all-pervading blessings which had always dominated the sorrows of his life—symbolized his joys in faithful accomplishment and his security in human friendship and love which ultimately triumphed over every agony of mind and spirit—that outpouring of the heart of David now became to me as a fiery cross in the sky, lighting the mountain and even the Valley of the Shadow, and guarding against failure of will and purpose.

In this far away forest sanctuary we were as alone, as far as human companionship was concerned, as if shipwrecked on a remote island. In three months I spoke no word of English to a white woman; in fact, I saw only two white women—the wives of the Belgian officials in Rutshuru.

But the officials and the two or three other residents in the valley below were constant in their kindness. They sent me written messages with every offer of assistance in their power to bestow. The Belgian Ambassador to the United States, Baron Emile de Cartier de Marchienne, had graciously cabled his Government requesting

that the Belgian officials in Africa be instructed by telegraph to extend to me every aid and comfort and to accord me all possible facilities for my return to America, or, if I desired to remain, to do what was possible to enable me to continue my husband's expedition. In response, the Colonial officials did everything in their power to assist me and to show their appreciation of my husband's work in the Belgian Congo. Administrateur du Buisson was of the greatest help in securing porters and M. Bock in his kindness sent me the mahogany planks from which Raddatz made my husband's coffin. The White Fathers forwarded me supplies.

One cable came through to me early in December from my old and valued friend, Benjamin F. Seaver of Brooklyn, who had noted that my cable to America had been sent via Kabale, Uganda. His message reached Captain Tufnell's hands, and with his unfailing thoughtfulness he dispatched it to me direct by a runner who made the journey of more than one hundred miles in three days. But no other cable—and there were many, indeed—reached me until the day before we left the forest. Nearly all messages had been three weeks in transit from America. I did not receive my mother's cable and letter, unusually delayed, until I reached Nairobi in February.

I quote here from a letter which I wrote as we neared the end of our work among the volcanoes:

"Our days seem short for all we must accomplish, but the work in this pure, cool air is so much better for me than if I had decided to go at once to Nairobi and on home to you. I am needed here, as I not only have a grip on safari management but I also know my husband's plans for work. I feel it my solemn duty to him who has done so much for me, not only in showing me this beautiful new world but in a thousand other ways, that I may not fail him in this extremity. I dare not think of all our wonderful brief life together or of a future without him. I must only think of the to-day and of a future of accomplishment for his sake."

Our porters were delayed in reaching us, and when they arrived were scarcely adequate to carry our loads down from the volca-

noes. On account of the size of the collection our loads were more numerous than they had been coming in, although both Leigh and Derscheid had moved their camps and had been working for ten days on the lava plain below. In addition to the plaster casts and formalin specimens we had quantities of moss and lichens and bark, the tip ends of the old gorilla tree, specimen branches of a few living trees, and an entire gorilla's nest. It was the best one I had found among fifty. It consisted of ground covering, that is, earth and twigs, and shielding vines like walls flanking and protecting either side of the nest and extending in a canopy to the tree above.

It was four o'clock when the last of the porters in charge of their native headman vanished down the mountain side. Five of us, Raddatz and I with Bill and old Thomasi and the gorilla guide, Mguru, remained for a little, in the inexpressible quiet of the deserted camp, to kneel in prayer and pay our last fealty to our silent leader. His grave was now securely covered by the protecting slab of cement, and on the low rock wall surrounding it I had planted masses of creeping violets, now in full bloom. As we knelt there the sun came out fine and clear, lighting in this ancient forest the spot where he would have longed to be and beside it the little plot where I hope my own ashes may some day rest. My prayer and farewell Bill followed in the Kikuyu tongue with his own anguished supplication. Thus was finally consecrated, with the homage of our broken hearts and with the outpouring of our tears, the spot where my husband's mortal body rests. But as Raddatz set in the last post in the high surrounding palisade and we walked in reverence down the deserted trail, we knew of a certainty that 'his soul is marching on.'

Just before reaching Rweru, we overtook the rear of the safari. Here diverging from our old trail, Mguru took us across a shallow ravine to where my husband's gorilla camp had been in 1921. These natives well remember their former camps, and it was easily distinguishable as an old camp site by the charred sticks remaining





HIS MORTAL BODY RESTS IN THE LAND OF HIS DREAMS.

*Photo. by Mary L. Jobe Akeley.*



*Photo. by Mary L. Jobe Akeley.*

TREES OF *HYPERICUM LANCEOLATUM* ("WILD ROSE TREE") SURROUNDED  
THE LITTLE BAMBOO HUTS OF MRS. AKELEY'S MIKENO CAMP.



*Photo. by Mary L. Jobe Akeley.*

MRS. AKELEY'S SAFARI LEAVING HER HIGH MIKENO CAMP.

there. It was seemingly as overgrown as if no one had set foot there for a score of years. I was glad to see this spot so that I might in memory relive the stories of his adventures and his hardships there.

Retracing our steps to the main trail and passing our Rweru camp ground, we traveled through the bamboo zone and reached the swamp now nearly dried up, a little before sunset. Back in the forest many of our black boys rested by the trail. Night would soon descend upon them and with it would come a grave possibility—the chance that they would abandon their loads to the elements and seek rest and refreshment in the village of Burunga below. Some of these porters had been in my service for two months and their appealing looks and groans as I passed them on the trail were not to be ignored. Accordingly I dispatched Bill, ever fleet of foot, to go on ahead to our old camp below Burunga and to send back as relief porters any boys who had gone in with lighter loads ahead. He hurried down. I next sent Mguru to the front to encourage the porters still traveling on, but ever slowing up and straggling out of the trail. Many of them had been in the high altitude of our camp so long that they were undoubtedly weakened and suffering under their loads.

Only one East African boy, Kit, carrying our water bottles and a camera, remained with us. Raddatz carried his own gun. Kit had gone to Kabale in charge of the porters when we had been compelled to send back for the second loads of cement. We had given him extra baksheesh for making the trip in quick time and he now seemed very confident of the route to Burunga. We had emerged from the forest and were traveling through the hilly lower slopes of the volcanoes where there is plentiful though somewhat scattered vegetation. We encountered a native herder driving home his cattle. As it was in a very muddy place, we waited some time for the herd to pass. Every boy in our safari was now out of sight. I was not watching any landmarks. In fact, once I had gotten out of the forest, through which I had traveled at



high speed, I had suddenly begun to feel very weak. By all rights we should soon see the fires of Burunga village and I would be glad indeed to get into camp.

Kit had diverted his course to the right and north. We were now in a maze of new-made cattle trails which suddenly led us into dense and unbroken vegetation along cliffs and bordering a watercourse. I suddenly realized that I had never seen this place before. I asked Raddatz if he recognized it as being any part of the country we had traveled through on our climb up the volcanoes. He said that it was quite unfamiliar to him, too. Then we asked our guide, Kit, and he, too, reluctantly admitted that he had never been there before. There was nothing in the world to do but to retrace our steps, climbing up the steep trail down which we had been traveling so quickly. It was plainly marked enough, which was fortunate considering that twilight was upon us and it had begun to rain. It was discouraging—the more so because so unnecessary; but one learns to take such errors on the part of natives in Africa as a part of the day's work and never, save in the case of a rare few, to rely seriously upon their judgment. No energy can be spared for a scolding about circumstances in which the element of fatality—at least in the native's mind—is so dominant.

It was quite dark when we again reached the muddy cattle trail. Kit now began to halloo and some natives answered. Presently boys appeared with a lantern. Bill had sent two parties in two different directions out in the hills to look for us. They soon led us back to the main trail. Now, for some strange reason, my knees began to shake as they never had before. When I took a step forward, they buckled up under me and I found myself kneeling in the muddy track. At first, I thought I had made a misstep and I walked more carefully, using my long bamboo walking staff as a support. But they continued to give way.

"Raddatz, just look at the way my knees behave," I finally said and my voice sounded as if it belonged to some one else. Raddatz came back and held out his hand and I scrambled up and started on. He did not say anything and I knew that after his long pull





*Photo. by Mary L. Jobe Akeley.*

MRS. AKELEY'S SAFARI TOOK THE TRAIL EACH DAY AT DAWN ON HER WAY OUT OF THE CONGO.



ON CHRISTMAS DAY THE NATIVE CHIEF AND HIS RETINUE GREETED MRS. AKELEY AT KISOLA WITH GIFTS AND EXPRESSIONS OF SYMPATHY.



*Photo, by Carl Akeley.*

AT BEHUNGI—IN THE DISTANCE THE VOLCANOES OF SANCTUARY.

among the volcanoes and with much of the responsibility of the work on his shoulders, he, too, was probably feeling as I was but was behaving better.

At last, and it seemed a very long time indeed, we reached the fires and huts of the Burunga village. My legs, now wholly out of commission, refused to obey my mental commands. I fell flat in the trail. The natives lifted me up and I again collapsed as soon as they let go of my arms. The women and children came out of their doorways to look at me, indrawing that half-sigh, half-groan of the surprised or sympathetic black. Two boys, I shall never recall which they were, supported me on either side down the last quarter mile to camp. I remember Bill was just below the village with another lantern. "Memsahib!" and that quick, intelligent smile of encouragement he always had in times of emergency. He and my tent boy put me on my cot. Bill took off my muddy boots and stockings and bathed my feet in hot water with the gentleness and solicitude of a mother for her child. Then I rolled into my blankets.

Even the all-refreshing cup of tea was not for me that night. I wanted only a little water. An hour or so later my tent boy helped me off with some of my outer things, and although I had no feeling of being asleep, yet it was near the dawn before I knew that I was at last in my little green tent and was not still wandering in the Kivu wilderness. It was the experience of that late afternoon and evening which decided for me that I should give up a plan long cherished by my husband and me and that I should not undertake, the next day, the two-day march to Kisenyi on the friendly open shores of beautiful Lake Kivu.

We were again on the trail at a reasonably early hour the next morning. I had sent a runner to Leigh's camp on the plain south of Burunga, telling him when to meet us. Accordingly, we had found him already in camp when we had come down from the volcanoes. At the Mission we found Derscheid who had just come in from Mt. Bishoke. After thanking the White Fathers for their kindnesses and showing them Leigh's paintings, we gave them a few



parting gifts and hastened on our way to our old camp at Busingisi. Derscheid accompanied us as far as this camp and then, as his outfit was all in Rutshuru, continued on there for the night.

The problem of securing sufficient porters had not yet been solved. Makasudi, our East African headman, who had been with Leigh in his camp throughout the Kivu expedition, I now left at Burunga in charge of the extra loads for which there were no porters. I still hoped to avoid the difficulty of further relaying our collection. At Busingisi, I persuaded the local chief to send back twelve men to Burunga for the loads we had left behind. They arrived in our camp about three in the morning with great noise and clatter, depositing their loads beside my tent. The next morning we again left a guard over our extra loads and hastened on to Rutshuru in the hope that M. du Buisson and the Mwami 'Nedezi could muster enough porters to bring our extra loads from Burunga and Busingisi.

To one unused to African travel this *impasse* may seem only an uninteresting detail of safari management, but it was a matter of greatest importance that all of our collection should be brought out of the Congo intact, considering the more than heavy price which had been paid. The Mwami was not only solicitous; he was actively helpful. He dispatched at once extra porters whom the local chiefs had no authority to summon and ordered them to go under the direction of our headman and to carry the loads on a short cut track across the Uganda border into Kisola. Thus they would avoid the longer and more circuitous trail by Rutshuru and Kinanira (Uganda). With this problem of transportation satisfactorily solved, we collected our goods in storage and said good-by to the kindly Belgians at Rutshuru.

Early the next morning we were afoot on our long homeward trek out of the Kivu and across Uganda to central Kenya. I was eager to be on my way. It was the morning of the twenty-fourth of December. Surely this year the Yuletide was no time for us to remember, nor should our presence cloud the Noël happiness of our Rutshuru friends. Our safari had been sufficiently augmented



at Rutshuru, so that each porter's load was a little lighter. They were on the last lap out of the Kivu beyond which no further service could be exacted and they were eager to finish the day's work and return to their shambas for the high celebration of the morrow. The safari, marching in good time, was soon well ahead of me.

Derscheid accompanied me on the trail. We talked seriously. Several weeks before it had been decided that he should remain as long as necessary to complete the topographical work of our mission and if possible to secure important additional data on the gorilla. We had never seen each other until he had shown us the map which he had been correcting in the office of the Minister of the Colonies in Brussels where my husband and I were planning our trip. In the Kivu his work had taken him much farther afield than it had been possible for me to go and still to supervise the concrete work for the Gorilla Group. Yet we had in common the consummation of my husband's plans and had shared not only the physical hardships but much of the mental stress. For one who had assumed for the first time the problems of scientific research in the field, he took his burdens not only seriously but masterfully, sparing himself not at all.

He now told me of his plans to go to the south shore of Lake Edward and continue his investigations there. The rains in the Kivu had practically ceased and the dry season was at hand. Heavy clouds still hung over the peaks and latterly a thick haze had overspread the lava plains and the valleys. Thus the continuing of the topographical survey was out of the question for the moment. It would have to await the coming of the rains and the consequent clearing of the atmosphere. It was for this reason that my husband had chosen to come in to the Kivu during the rainy season. Although we were bound to get much rainfall, it is only after the rain, usually in the late afternoon or early morning, that the atmosphere is clear and that wide views are possible. Thus, for photography, for painting and for topographical work, it is the only feasible time to work among the volcanoes.

The year had been an exceptionally wet one. It is reported by those who have lived long in Western Uganda or the Kivu that the weather runs in cycles of tens—that every ten years there is exceptionally heavy rainfall; that 1921 had been the year of maximum dryness and that 1926 had been the year of maximum rainfall, which would constantly diminish until 1931, when it would again reach the maximum of dry weather. If this theory be true, it would certainly account for the good conditions of weather and sunshine which my husband had found in 1921 and the heavy precipitation which we in contrast found in 1926.

Three miles out of Rutshuru Derscheid stopped to say good-by. We exacted of each other one or two promises and gave a few instructions as to our records and diaries in the event that either one of us should not return home. We said farewell and without looking back continued on our opposite ways, he to pursue alone for five months the work of our Kivu mission and I to undertake to complete my husband's plan of work at Lake Hannington in the Great Rift Valley in Kenya. As I came into camp at the little rest house at Kinanira with violets transplanted from far away England all abloom in a wide border flanking the shaded porch, with springy, moss-like grass carpeting the stockaded inclosure in which our tents were pitched, and with the Kaka waterfall, where the Rutshuru River falls forty feet over a rocky ledge, roaring in my ears, it was indeed the strangest of all Holy Nights.

The stars were still bright when I arose the next morning. I had determined on this trip out of the Congo that I would put our safari on the trail by daybreak. This would make it possible to do much of our fifteen to eighteen miles in the cool of the day and to reach camp before the sun should touch the meridian. Accustomed as we all had been to the cool weather of the high altitudes for the past two months, it seemed the only safe procedure. When at three-thirty each morning I turned out in dressing gown and mosquito boots to rouse the camp, Bill and the cook were awake and moving. The cook had boiling water ready for our early tea and Bill had his own personal outfit and tent packed for

the march. But it was difficult for me to get our sleepy tent boys out of their warm beds. While we ate breakfast, our dunnage was packed and tents struck. Often we traveled half an hour by lantern light.

In Rutshuru we had obtained one chair, thinking it wise to have it in case any one should be in need on the way out. Raddatz had twisted his knee on the way down to Burunga and the chair proved a boon to him. On this day all of the safari urged me to ride along this beautifully built and level road from Kinanira to Kisola. But to rest and ride was the last thing I wished to do. Rather did I wish to become physically exhausted and thus to attain a little mental surcease. Trudging with Bill and Thomasi along the tree-shaded highway, bordered by shambas of ripe bananas and fields of blossoming peas, as multicolored as our sweet peas, and with Leigh and Raddatz and the long line of porters far ahead, I covered the eighteen miles into camp.

The chief and his retinue were there to meet me with presents and with many expressions of sympathy. Again we sat in the tree-shaded, grassy inclosure, where my husband and I had had such a happy afternoon and evening conversing with the chiefs on our way out. Again my tent was placed on our familiar campsite, and again and again I fought for the courage to go on, fought to turn my mind away from thoughts of home, from the joyous Christmases my husband and I had had together and from the future, now altogether foreboding, overpowering. Raddatz and Leigh in their kindness forebore any mention of the day. I had given Bill the baksheesh for all our boys with the request that he distribute it quietly and without my knowledge and that he receive for me their thanks. So these simple natives with considerable understanding spared me a mournful task.

We all turned ourselves to the affairs of the moment—to dispatching a letter to Captain Tufnell in reply to one his runner had brought with advice as to our outward trip. Then the Busigisi detachment of our safari came in with Makasudi. He had 'walked them off their feet,' they said, in order to make our

camp that night. They were all paid off and with baksheesh for the extra service.

But the event at Kisola which will ever be outstanding was when a handsome little black boy came up to my chair where I was having tea. His beautifully modeled body was naked save for a little black and white spotted goat skin swinging from one shoulder. He was about eight or nine years old. He looked me straight in the eyes and smiled—smiled with his big, shining black eyes and with his childish mouth, disclosing white and perfect teeth. With his chubby hands he offered me a basket of luscious ripe red strawberries which he had been carrying porter-fashion on his head.

"For Memsahib," he said in the Kinyaruanda dialect, "and I hope she has good health." He stood smiling at attention, his chest held high and his back straight as an arrow. I have never seen a child of more beautiful physique. Then he ran away and very soon came back with another basket, this one with freshly shelled green peas. A troop of little boys followed him, one or two with small baskets of tender green beans. This time some real excitement was afoot. They were all dancing about, chattering and laughing. Finally, out it came.

"Memsahib, I wish to go on safari with you," he said. "I wish to go on as far as you go."—The news of the destination of our expedition was evidently abroad—"I wish to stay as long as you stay. I want to go with you to see a *new country*."

What a gift! But it was far too good to be true, I thought. Certainly it was not allowed to take such a young child from his district. The chief, or his parents, or the District Commissioner would surely object. But, in his eagerness, his quick mind had covered all those points. The chief's headman was there to say he could go; his grandmother was there to speak for his family, since his father, one of the chief's personal staff, was on safari and his mother's youngest child was too small for her to bring with her or to leave behind. The ancient grandmother, clothed only in goat skin, but with many earrings, armlets and necklaces,



smoked vigorously and long at one of Bill's cigarettes. Then she told me she would be very pleased if I would take the little Mihigo, as he was called. Next began the question of how he would be returned to his tribe. At this point my cook stepped forward. As soon as our safari was finished, he would return to Kabale, his father's home, and he would bring the little boy with him to the District Commissioner who would surely send him back to Kisola. Thus it was ordained that little Mihigo, 'the Hunter,' whose hut and shamba were on the 'Hill of the Lion,' should go with me as my personal toto to the end of our safari,—that his tears should be no fewer than mine when I should say good-by to him and to Africa. I called him 'Bob'—it was so much easier to say and remember—just as Carl had named Uimbia Gikungu, 'Bill' when he, just such a little boy as this, Bill told me, had begged to join 'the Bwana's safari' twenty years before.

It was only ten o'clock when we reached the high stair-step hill west of Behungi. The grade was so steep and the hill so long that I could well understand my husband's resolve never to climb it in the withering heat of mid-afternoon as he had done in 1921. Near Behungi, as we were traveling through the bamboo forest as the end of the safari, Bill and I came upon a native limping along in the opposite direction. He was weeping and moaning at every step. His face was dripping with blood. Bill stopped to find out what was his trouble. He told how an elephant had attacked him and had killed his companion in the forest where a few hundred yards below they had been cutting bamboo. Our Kisola porters were not long in making good their escape from the Behungi forest that day.

At Behungi I said a long and reluctant farewell to the now distant volcanoes of sanctuary and of sacrifice—to the blue-patterned lakes which like a gigantic turquoise anklet encircled their far-extending foothills—to Nyamlagira whose red earth-fires ever illumined the evening sky.

The next morning, just as we reached a little clearing in the

bamboos below our camp, we had unmistakable evidence of the truth of the injured native's story we had heard the night before. The bamboos were widely trampled and uprooted; the ground was plowed up as if by shell-fire, while strewn along the trail for many yards were the gruesome remnants of the poor native's body. Our porters had gone through on the double quick, and Raddatz and Leigh and their gun boys were on the alert. Bill, with the elephant gun ready for action, kept between me and the danger zone. We were not long in following the safari. However, in justification of the elephant, I had it on good report that he had turned 'rogue' only after having been hunted for some weeks by natives with poisoned arrows.

The Governor of Uganda had been spending Christmas at Bufundi on Lake Bunyoni and a party of missionaries were due there on the twenty-seventh, the day of our own arrival. Captain Tufnell had informed me of these plans and suggested that I camp on the Kabale side of Bunyoni. In consequence I had told my headman, Makasudi, who always walked at the head of the procession, not to set up camp but only to rest the porters and wait for me at the lake. Again I had an example of the working of the native's mind. As I came over the last hilltop and saw the lovely lake spread out beneath me, I also saw that some of the tents had been erected and that the cook's fire was smoking briskly. Makasudi had arrived at Bufundi; the Governor had already gone and no missionaries were in sight, therefore he thought there was nothing to hinder our camping there. After a hasty lunch, we packed up and the fleet of dug-out canoes again transported us across Bunyoni's enchanted waters. We met the missionaries' party in the middle of the lake.

On a high knoll at the water's edge we pitched our tents by a tiny rest house on a camp ground dug out of the hillside. Long before daylight our Kabale porters had thrown up their head loads and we were on the last stretch of our march from the Congo. It was nearly all down grade and for part of the way I



MRS. AKELEY DROVE HER HUSBAND'S MOTOR LORRY WITH A TON AND A HALF OF FREIGHT, A THOUSAND MILES ACROSS EQUATORIAL AFRICA. HER LITTLE TOTO BOB IS STANDING ON TOP OF THE LOAD.



*Photo, courtesy of Field Museum of Natural History.*

GREATER KOODOO—COLLECTED AND MOUNTED BY CARL AKELEY FOR  
FIELD MUSEUM OF NATURAL HISTORY.



tried the chair. The porters, strong and keen, were in happy mood. To my amazement they ran along chattering and singing as if they carried no burden whatsoever. And my little toto, Bob, flourishing or tattooing in time with his small bamboo cane, happy and important as any drum-major, pattered along beside us in the narrow footpath as we charioted onward in our chair. For three or four miles I was content to let them carry me. Such superbly built men as these Uganda natives bear all their burdens lightly and with a song. There was no need that day for my compassion but I gave them in full measure of my gratitude.

The gorilla guide, Mguru, had insisted upon accompanying me to Kabale and for him I had secured permission from M. du Buisson for the journey and a *barua* (pass) for his safe return. Bill was glad to have him as they had become great friends and Mguru was always helpful in getting the safari on the road early in the morning. He stuck close to Bill and me like a faithful, devoted dog who knows that soon his master will leave him behind. He displayed this quality of zealous attachment in a remarkable degree, infinitely greater than any of our sophisticated East African natives with the exception of Bill. My observation of Mguru and his kind leads me to the conclusion that as a general rule faithfulness in the African native diminishes in proportion to his years of contact with white men, and certainly his loyalty is in inverse ratio to the number of his masters.

The last two or three days before we reached Kabale, Mguru had indicated frequently that he wanted to ride in my motor car. Although he was probably thirty years old, he had never seen a settlement larger than the government posts of Rutshuru and Kisenyi, so the two short duka-lined streets of Kabale, with their Indian vendors and the motor roads over which lorries and safari cars pass occasionally, astonished this simple Kivu guide. He was impatient until my car was put in commission. Then with little Bob on his knee beside me on the front seat, that they might not miss anything, he took his first motor ride. Everything about

the automobile was to him a mystery. I am sure if I had allowed his investigative impulses free rein, I should have had to replace many of the accessories of my car.

Several of our other Kivu natives accompanied us to Kabale but without permission. I had paid them off at Kinanira and when they had asked to go on I had told them it was impossible because I had no permits for them, and that their pay automatically stopped the day they left the Congo; but each morning they were tagging along at the end of the safari trying to seize some light load and to make themselves so useful that I would soften my heart and give them baksheesh at least. The kitchen tototo whom Enoka had had for more than a month at Kabara was particularly insistent and he continued to be so helpful to my cook that he won his pay.

Four busy days we spent at Kabale—days particularly crowded for Raddatz. He overhauled our motors, laid up for nine weeks, and as a safeguard in transportation he made wooden cases for a part of our collection. These boxes I had to send by government lorry to Masaka and transship to Kampala as they were more than our own lorries could carry. It seemed an achievement in meeting responsibility when our motor safari was at last ready to roll down the long hill from Kabale. When we were finally ready to say farewell to Captain Tufnell, to call '*qua beri*' to the last of our Congo boys—to faithful Mguru waving his crownless straw hat while his face dripped with tears—we realized for the thousandth time the continuous allegiance my husband had ever given to the onus of his appointed task.

From our Kabara camp I had sent a letter asking Captain Tufnell to secure for me two motor drivers, one for my husband's and one for Derscheid's lorry; but the best he could do was to get me one Indian driver. Accordingly, I started to drive my husband's lorry with more than a ton of freight and with five black boys in addition. I gave my light car to Leigh.

I had driven several of the lorries for our collecting and photography, but with only a small load—a few people, boxes, et cetera.

I had wanted to drive one of the laden lorries from Nariobi to Western Uganda but my husband had said it was too heavy a job for me. I now found the task an all absorbing one. The 'feel' of a highly packed and heavily laden lorry was a new experience. To keep it on the narrow, crowned, curving road, to drive it down the steep grade of the Kabale hill up which we had had so much difficulty on the outward trip, required all my skill and considerable strength. To get it up the steep grades, I had to go into first speed while my boys blocked and pushed. The business of driving this lorry across Uganda, to the Lower Molo in the Great Rift and finally into Nairobi, a distance of a little less than a thousand miles, proved an undertaking demanding such complete mental and physical attention that I could not have had a more salutary experience.

All along our homeward way we were the recipients of much kindly attention: at Masaka where Captain James T. Stewart assisted us in reshipping our goods consigned to Kampala; at Kampala where these goods were forwarded by boat and rail to Nairobi; and in Entebbe where the Game Warden, Captain C. R. S. Pitman gave us valuable information concerning the conditions to be encountered at Lake Hannington. He and his wife accorded me a hospitality I warmly appreciated. Mrs. Pitman was the first English speaking woman I had seen in three months.

The Uganda native king who had been so insistent that we visit him on our return through his domain was unfortunately away on a long trip, but his chief made us welcome and there we spent a day in photographing native occupations and dances. Thereafter our job was to cover as great a distance as possible in the day as we were all eager to get on to the Lake Hannington task—the painting of the background and collecting of the accessories for Mr. Pomeroy's group of greater koodoo.

Near Eldoret we were mired down completely for two hours by a heavy rainfall which in a quarter of an hour rendered the roads a mass of sticky mud; but, as a compensation, when we finally drove our motors out on the rolling hills at the foot of the

Uasin Gishu Plateau, we had as beautiful and slow-fading a sunset as I saw in all Africa. Our camp, pitched by the roadside on open shelving ground, was fringed by large table-topped acacias, appearing only as strange black silhouettes against the orange sunset sky. The quality of that hour remains ineffaceable.



## CHAPTER XXI

### IN THE EYE OF THE SUN

ON New Year's Day of 1927, in heat that would have registered 120° F. in the shade, had there been any shade, we drove our heavily loaded lorries up to a ten thousand acre sisal farm at the end of the motor track, the last outpost on the route from civilization to Lake Hannington in the Great Rift Valley in Kenya Colony. Miles of arid country—we were not sure how many—inhabited only by a few native Kamasia sheep herders, avoided by white men, and passable only on foot, still lay between us and the camp site that Carl had occupied fifteen years before at the southern end of the lake. Even in prospect as we began the work of off-loading and shaping the loads for our porters, the pilgrimage into this unfriendly region of almost intolerable heat, foot-cutting volcanic slag and steaming alkali water, would have been unendurable but for the inspiration of our purpose. The work my husband left unfinished was ours to do. Loyalty to him and to his cause gave us strength.

In accordance with Carl's plan, Leigh was making the trip to paint the remarkable view of Lake Hannington from the escarpment as a background for the Greater Koodoo Group. Radatz was bent upon the study and collection of data necessary for the manufacture of rock, plant and soil accessories in this group. I not only had to assist in plant collection, and to make photographic studies of plants and landscapes, to hold the expedition together in the face of relentless field conditions, so that our important work might be completed, but furthermore, I had set my heart upon obtaining, in addition, the photographs of Hannington's great colonies of pink flamingoes that my husband had so dearly wished.

When my husband had made this trip in 1912, he had used

horses and donkeys for transportation and had remained in the overwhelming heat only a few days. Our safari included no pack animals and there were none to be had in the vicinity. We had hoped that a motorway might have been opened to the foot of the lake but even for the ambitious trader there was little incentive to such an arduous task.

My attempt to engage porters for the journey by writing and telegraphing ahead of our arrival to the District Commissioner in Eldama Ravine had been of no avail. No porters had been secured. By the merest chance, a few native Kamasia were cutting grass at the government post when we arrived. After much persuasion on the part of the District Commissioner and myself, I recruited seventeen all told who that evening traveled across country and awaited us at the Evans' sisal ranch, thus reënforcing the ten native boys who had accompanied us to the Congo and back. With so small a safari we had to proceed in relays. I decided that Leigh and I should go ahead and get on location immediately while Raddatz, waiting at the ranch for the return of the black boys, should care for our surplus goods and safely store our Congo collection.

We cut down our equipment to the last ounce, then after two days of searching among the local natives, we took up the trail behind the only guide obtainable. He was a tall, graceful Kamasia herder. Like all the rest of his tribe, he possessed the greatest indifference toward accumulating any of this world's goods at the expense of physical effort. After we were well under way, he told us that he did not know exactly how to get to Lake Hannington and that he really was not looking for a job anyway. It was obvious that never before had he been on the trails leading to and from the lake, but we persuaded him to keep on and give us the benefit of his general knowledge of the region.

Fifteen years had elapsed since our faithful Bill, upon whose advice and experience we had all come to rely, had visited the country. His recollections of the route were in consequence vague. Fortunately I had asked my husband many questions

about Lake Hannington and had received a somewhat detailed account of the locality in which he expected to work. The main task was to reach the lake. As we steadily traveled down into a lower altitude, the heat increased perceptibly. Through my heavy tramping boots the sun's penetrating rays and the burning, sharp volcanic slag soon cooked and blistered my feet. Occasionally a green spot in the distance lured us on with promise of shade, but when we reached it we found only a stunted thorn bush or acacia tree, with the sun pouring unabated through the ineffectual network of its tiny leaves. Bill, with the frugality born of experience, doled out the rain water with which Mrs. A. S. Evans, our hostess at the sisal farm, had generously filled our water bottles from her own meager supply.

Our East African boys who had come with us from Nairobi, and had proved their mettle during nine months in the field, now walked like old men and complained bitterly of the heat. The recently recruited Kamasia struggled along pathetically, awkwardly swinging their unaccustomed loads low on their backs instead of balancing them on their heads in usual porter fashion. Their bodies, long, lithe, and lightly built, were wholly unfit to bear burdens. Their bare feet limped over the thorn-infested ground. Every growing thing along the trail, from the largest acacia to the smallest bush, wore an offensive armor of spikes tormenting their naked bodies.

By nightfall we had traversed the fifteen painful miles which should have brought us to Carl's old camp ground, but we had not even glimpsed Lake Hannington. We pitched our tents where the hot waters of a dozen springs pouring into the Lower Molo offer slight refreshment. After a night of true tropic heat we awoke unrefreshed to take up again a trail leading steadily downward which we could only hope might bring us to our destination.

At a little river, only slightly brackish and deep in the shade of wild fig trees, our porters halted. It was only nine o'clock and as they knew that soon we would reach 'salt water,' as they called the lake, they were reluctant to travel farther in the heat. They

clung to the cool shade. They drank and splashed and waded in the river. After a late lunch, Bill and I drove the disgruntled safari to the trail. Their unwillingness savored of revolt.

According to our maps the lake lay directly east of us, but to my surprise and consternation, the trail we followed bore steadily north. We had traveled perhaps four miles when in the late afternoon we sighted Hannington's unruffled waters.

My first glimpse of the tranquil opalescent lake, stretching like a broad river beneath the rim of the escarpment, made me forget the two-day journey with its relentless sun, which had left my face and hands like parchment, my feet scalded and bleeding. But if Mother Africa punishes her inquisitive visitors, she never fails to make atonement. To those who seek and dread no hardship in the search, she reveals in compensating vision her rarest beauties. Here, where man-made contrivance has not yet smoothed the path, we found the splendor of Africa undimmed. The waters were turquoise, jade and emerald, and the flamingoes, feeding by the thousands in its oozy shallows, were as a tremulous rosy island illuminated by a brilliant sun shining red and low in a lurid western sky.

My enchantment, however, was gradually replaced by a disquieting awareness that we had reached Lake Hannington not on its southern shore as we had intended, but at its extreme northern end where the flamingoes are found in greatest numbers. The guide who should have taken us eastward across the hills, had chosen instead the well-known caravan route to Lake Baringo which swings in at the foot of the Laikipia Escarpment at the north end of the lake.

I knew that the lake was thirteen miles long. That meant that we were more than thirteen miles from Carl's old camp site. Indeed, we were farther from the spot where the koodoo background was to be painted than we had been at the sisal ranch two days before. The most important thing in the world to me now was to see Leigh established on the Escarpment above Carl's old camp for the painting of this landscape and to relay our in-





*Photo. by Mary L. Jobe Akeley.*

THE NATIVE HEADMAN WAS A TALL GRACEFUL KAMASIA.



sufficient porters back to the Lower Molo for Raddatz. Fatigued and footsore though we were, and quite weary enough to camp, we started on down the lake.

On closer approach the opalescence of the lake gave place to slimy greenness. The shallow water was bordered by low mud flats that were crusted with a deposit of salts mingled with the feathers, bones and droppings of flamingoes. The sickening stench from the thick, foul waters was powerful enough to discourage a disposition to explore, and to explain the surprise of the few white settlers with whom, before starting, we had discussed our proposed journey.

As evening came on the flamingoes passed us in tremendous numbers, flying low over the water in long pinkish streaks against the blue-green background. Above them big, black-winged, white pelicans flew in V formations. Apparently the pelicans had the right of way at the higher altitude, while the flamingoes flew low, not by choice but by necessity. All during the sunset and twilight hours they kept up their highly vocal flight. At dawn the flamingoes move again to the northern end of the lake, where they feed in the shallows, scooping up the minute life from the mud flats with their long trough-like bills. Their plumage is in the main a very delicate rosy shade, but flame colored feathers on wings and breast give the impression that the bird is a vivid pink.

We wound in and out along the shore. Finally we made camp five miles farther on near a clear spring. Though rankly alkaline, it was still a God-send because we had only one debbie of water with us. The lake water was too thick with slime and too ill smelling to be used in any capacity whatsoever. On the trails in the vicinity of our spring a little forage still remained. Here we saw many signs of hippo. At twilight two swam near to shore sloshing themselves about in the water, rising to the surface, then snorting and turning and diving out of sight.

That night a light rain fell, accompanied by sharp squalls that nearly blew our little tents down, but the next day as we traveled

down the rocky shore it was again hot almost past endurance. When we reached the Boiling Springs five miles from the southern extremity of the lake, the sun was so intense that I could not look into the steaming waters. These springs were a landmark for Bill, who immediately recognized an old trail that he and his master had used fifteen years before. While I waited with the safari, he followed this familiar path to a cattle manyatta in the hope of recruiting a native guide. At his approach all the men ran into hiding leaving a woman and a few children to receive him, but he finally routed out one sturdy middle-aged man who had hidden himself under the bed when he had been informed that a stranger was approaching.

"*Mimi mzee, Mimi mzee,*" (I am an old man, I am an old man) the native whined repeatedly. He mistook Bill for a representative of the District Commissioner. As the young and able-bodied Kamasia are often drafted for government work, it seems to be their favorite method of escaping labor to assert loudly both age and physical infirmity.

The 'old man' finally consented to be our guide, however, and under his leadership we toiled on, following in the bed of a sandy, thorn-grown donga, then up across boulder-piled hills. For only five minutes at a time would Bill permit me to rest under some tree whose thin foliage cast a doubtful shade. Yesterday my feet had been scalded and cut. To-day they were covered entirely top and sole with solid blisters. The scorching heat of the rocks under foot and of the surrounding atmosphere grew more and more intense. But Bill allowed me no respite. He almost impatiently urged me on. His reason was finally apparent. I had no water. The hours that one can travel without water and in such blasting heat are indeed few. Bill knew this. His anxious watchful face bespoke his concern at my predicament. Leigh had somehow become separated from the party and the boy who carried his water bottle and my own had quickly followed him without giving us any warning.

We pushed on, climbing a steep slope up which graceful klip-



springer leaped before us, and a little way ahead stood watching our labored efforts. My little toto, Bob, was struggling painfully to keep up. His strong bare feet were torn and bleeding and his smiling face had become serious. Until this morning, always eager to do more than his share, he had clamored to carry my water bottle and had relinquished it only to one of the boys when he had been told that he was slowing up the safari. Now he had taken off his spotted goat skin from his shoulders and had twisted it tight around his loins. He was an heroic little figure indeed struggling along valiantly with the procession. Bill now emptied his last cup of water from his own small canteen and Bob and I shared it. I left a quarter of a cup for Bill but he would have none of it and made me finish it. Thus we were urged and sustained to cross the high ridge and travel down again over the roughest volcanic slag that we had yet encountered.

At the top of the ridge our Kamasia guide suddenly pointed far away into the valley below, indicating a long line of green trees and saying that there we would find a little stream. The sight cheered us amazingly. Hope had made us strong again! It was three-twenty when we completed the descent to the water and we had not tasted water for four hours. Ignoring all the rules of the tropics, I drank from the stream. The water which had run for miles under dense growing thorn and wild fig trees was refreshingly cool and had a peculiar earthy taste like that of a New England brook after a spring rain. I drank sparingly, only enough to stop my craving; then I waded in and splashed my clothing and soaked my hair in the water.

That night as I lay in my cot in one of the few level spots among the rocks and thought over the struggle of the day, I realized as I had on many previous occasions, how much responsibility for our success and safety Bill was continually assuming. It was his wisdom, his persistence, his caution which had brought us through without mishap before fatigue overcame us. And if doubt or discredit should ever come his way, heaped upon him by enemies, white or black, as is often the custom of the country, of

a certainty the chronicles of this expedition will ever stand as a living witness for Uimbia Bill, staunchest and most loyal of servants to my husband and to me, and to every interest that affected the welfare of our undertaking.

My boys curled up in the crannies and crevices. The night continued warm, but there was a fresh wind and a brilliant moon. With my blistered feet bathed and bandaged in witch hazel I slept well. But little Bob, lying on a tarpaulin at the head of my bed, groaned all through the night. His sturdy little body was very tired; the trip had been too hard for him and I was quite anxious for his welfare. When we finally reached our permanent camp, the poor child collapsed. For three days and nights he had high fever and I relieved him by keeping him covered with a soaking bath towel, a method often used in fever cases. Accustomed as he was to the cool climate of Western Uganda, he did not recover his vigor while we stayed in the heat of Hannington.

By making our way up the stream and following a hippo trail for another three miles we had come to the approximate site of Carl's old camp. Thus having traveled fifty-five miles over the volcanic upheavals of this remote and desolate valley, we had finally located the spot which, but for the ignorance of our guides, we should have reached our first day out. Later the Hannington herders showed us their short cut to the duka at the Evans farm. In the flimsy shade of two gigantic acacias, just beginning to put on new leaves, we established our main camp.

After an afternoon and morning of reconnaissance Leigh and his porters established his camp on the crest of the Escarpment, where he had a fine view of the country we had just traversed. With the artist on location, ready to begin the background painting for the Koodoo Group, our Nairobi boys and our seventeen Kamasia recruits returned for Raddatz and the rest of our outfit. For two days my camp was small indeed. My whole menage consisted of Bill, Bob, and my tent boy. We were all glad to see Raddatz. By good luck, they brought him in over the shortcut we should have taken.

In our main camp on the equator and only 2500 feet above sea level the sun was powerful from eight in the morning until late in the afternoon. The boys built us grass bandas insulated by hanging one or two tarpaulins inside with an air space between. Although the walls of the bandas were made of reeds thickly and closely placed, yet they soon shriveled and dried within a week so that one could easily see through them. Inside my banda the mercury stood at from  $110^{\circ}$  F. to  $120^{\circ}$  F. during a great part of the day. It was thus *seventy degrees warmer* than we had averaged in the high Kivu volcano camp. Under such conditions it took no small effort of will to go on with either mental or manual work requiring close attention to detail.

We awoke each morning unrefreshed, but on only two afternoons after lunch did any of us take an hour off. It was necessary to finish the job before the heat would 'get us.' Some of our best boys whimpered and grumbled continually and the 'weak brothers' became worthless. It was so hot that our laundry dried a few minutes after being hung on the line; the skin on our faces and arms resembled parchment; our mutton and a few freshly-killed guinea fowl became dried meat in a short time while hanging in the air; and our bread, one day after baking, unless carefully protected in tin and wrapped in a damp cloth, became too hard to cut. We sent food and water up to Leigh daily, frequently made the two hour climb to his camp for accessories, and all did our best to speed up the work. There was much to do and only one way to do it—to keep at it and by so doing to shorten our stay.

We were camping between two streams, one considerably cooler than the other, but both disagreeably alkaline. They were fed by hot springs and just below our camp one spread out into a marsh filled with rushes and coarse grass. Almost anywhere in the apparently dry land adjoining this marsh, water could be found by digging down from six to eighteen inches. In such an excavation the water was quite cool. Here we kept our butter supply.

Carl had often told me of the convenience of his old camp at

Lake Hannington, where one spring had afforded clear, cold drinking water and another had furnished hot water for baths, laundry and dishwashing. Believing that we could find these springs, we had left our still at the sisal farm. Although we were near the old camp site which Bill had identified, the cold spring was nowhere to be found and the natives of the vicinity could give us no information about it. They told us that a pool of rain water three miles distant held the only cool water in the valley, but the dark colored liquid the boys carried in tins from this puddle was too disagreeable in taste to use. We therefore sent back to our motors for the water still and soon had the joy of drinking 'sweet water.' Just two days before we left our camp, however, Bill had noted signs of water in a clump of green trees only a few rods from Leigh's camp. Ironically enough, on climbing down the gulley to the spot, he found a copious spring of pure cold water.

Leigh had selected a fine location. On his right and left rose and fell the sheer rock walls of the Escarpment. One bold pinnacle with a dwarfed and twisted tree rooted in its crevices outjuttred in the center foreground. Outspread two thousand feet below him was Lake Hannington, through the day bluish green but in the evening reflecting all the glorious colors of the sunset. Off to the west many low lying lava hills tinted with all the vivid desert shades of rose and blue and violet piled one upon another until they met the remote rim of the Western Escarpment. On clear days pale blue Lake Baringo was visible. This was the unforgettable scene which Leigh chose to paint.

Before the rinderpest of 1896, the greater koodoo ranged along the Eastern Escarpment in fair numbers, where during the day they sought refuge from the heat and flies of the lower pastures. From Leigh's camp their old trails led back across broken table lands into almost impenetrable thorn country and down the steep slopes to the valley below, where amid massive boulders these impressive antelope had found occasional clumps of vegetation as forage.



The greater koodoo is one of the hardest to shoot as well as one of the finest of the so-called bovine antelopes. In spite of his size he is a beautiful animal, gracefully built and stylish in action. His clean cut head bears proudly a pair of long spiral horns. In this locality the few greater koodoo which have survived now range around Lake Baringo. They are fortunately protected by law. Since these superb animals are so scarce that they are no longer available in this wonder-spot of Africa, Mr. Pomeroy had found it necessary to collect them in the bush country of Eastern Tanganyika, where after many days of strenuous hunting in the vicinity of Dodoma, he had secured with Rockwell's assistance three of the six specimens needed for this group.

As Mr. Pomeroy's hunt had progressed at Dodoma, the animals grew more and more shy. Although he had hunted persistently, starting out each day in the first light of early morning, he had found it impossible to approach within rifle shot and had been compelled to move southward to Gulwe. Here, where greater and lesser koodoo range together, his efforts met with unusual success. As a result of his tenacious effort the greater koodoo collection was completed. Six specimens for an additional group of lesser koodoo were also secured and an eland and two dik-dik that my husband had very much wanted for the Water Hole Group were added to the list for that exhibit. Rockwell had cared for the skins and skeletons and had kept full taxidermic records. Mr. Pomeroy's largest bull, a magnificent animal, whose length of horn measured fifty-three and one half inches, is destined to be the dominant figure of the Greater Koodoo Group.

Hippo were numerous near Lake Hannington. We found two-track trails, wide and deep such as only a hippo makes, extending five miles from the lake to a little oasis-like pocket in the arid valley above our main camp. There the forage was plentiful in contrast to the boulder-strewn lake shore. Each track retained the fresh imprints of their flat feet, while scattered along the way were little piles of half-chewed grass just as it had dropped from their huge square mouths. Bill kept very safe watch the first night

or two, lest one of these night-traveling river horses, happening suddenly upon our camp, even without vicious purpose, might charge my little tent through sheer surprise.

Each night noisy leopards came within earshot—their voices were unmistakable and we were told that they often invaded the manyattas of the natives and carried off their sheep and goats. From about eleven until well toward morning their hoarse coughing mingled with the shrill bleating of the goats and sheep. At dawn they vanished into their dens in the rocky caves above. Occasionally at night I also heard the familiar wail and laugh of hyenas, and I often saw their footprints in sandy spots along the trails. Although we neither saw nor heard a lion, the natives told us that a few lived in the vicinity and that they often heard them roaring in the distance. Probably they range on the Escarpment where there are still a few herds of zebra and impalla.

On the Escarpment we found a scattering vegetation. We collected low plants and blooming shrubs and several loads of lush, pinkish yellow grass, which grew in bunches among the rocks. Plaster casts were made of these and dried and formalin specimens were added to the collection. In the valley, along the slopes and on the top of the Escarpment almost every growing thing from the largest table-top acacia to the smallest bush wears a defensive armor of thorns. Probably the one notable exception is the wild fig tree.

During the three weeks we spent at Hannington a great change took place in the appearance of the trees. Wild figs that had been barely budding now sent forth new leaves, changing quickly to full dark foliage. Their trunks and branches were highly colored with full sap. The acacias cast but little shade. Some of them put out tiny golden blossoms while others became masses of feathery white bloom. It is by such manifestations that the natives prophesy the coming of the rains. The whole country took on a spring-like aspect in spite of the fact that no rain had fallen in any quantity for about nine months.

As we entered the valley, journeying along the lake, a few



*Photo. by Mary L. Jobe Akeley.*

LEIGH SELECTED A FINE LOCATION ON TOP OF THE  
EASTERN ESCARPMENT.



*Photo. by Mary L. Jobe Akeley.*

MRS. AKELEY WITH HER SAFARI COMPLETED A JOURNEY OF ONE HUNDRED AND TEN MILES ON FOOT THROUGH THE GREAT RIFT VALLEY.



drops of rain fell late one afternoon. Immediately the Kamasia became excited. Each plucked a branch from a small tree and with it cut circles in the air, "S-s-s-se-s-s-s-sh, s-s-s-se-s-s-s-sh," they hissed as they capered over the ground. They were entreating the rain god not to rain upon them before they should reach the shelter of a camp. As the dark cloud quickly passed, the natives were doubtless convinced of the efficacy of their incantations.

For me in my banda such a thing as privacy was unknown. At any hour of the day I could look up from my work to see a wondering Kamasia gazing at me. Early in the morning their flocks were driven to our streams from the thorn-inclosed manyattas that protected them during the night. Men, women and children came with the herds, and after their calabashes had been filled and after the sheep had drunk their fill, curiosity prompted them to remain. A spreading acacia thirty feet from my tent afforded the most popular rendezvous. There in groups of twos and threes they took turns watching and discussing my movements.

The Kamasia command attention. They have fine interesting features, with a really charming expression of eye and mouth. There is no suggestion of the negroid about their high foreheads, their straight well-formed noses, their beautifully modeled heads. Their bodies are tall and slender, their bearing erect and stately. Posed with their long staffs or spears, they are the embodiment of natural grace.

The women are somewhat less comely. Their necks are burdened with many strings of white and blue beads, their arms and ankles, heavy with bracelets and anklets of steel and brass wire. Their heads are smooth shaven; their simple garments of skin or cotton are stained with earth and grease. On their backs they swing small bags of skin in which they carry their gourds or calabashes of milk and water.

Shortly after our arrival, the old Kamasia chief, attended by some twenty followers, made us a visit. I was busy when he arrived and, as by this time I was quite accustomed to an audience,

I merely noticed that Bill was surrounded by a group of natives. Then I became aware that Raddatz was enthroned on a chair in their midst and that an old man, dignified by a seat on a chop box, had tied a conspicuous white flag to his spear. A moment later Bill summoned me to the parley. The chief spoke no Swahili. However, we learned through his interpreter that he wanted to know why we had not informed him that we wanted to camp in his territory. He stated that it was the custom for strangers to notify him of their presence and that it was his practice to supply all their needs. Nothing was farther from our expectations than to discover a chief and his retainers in this valley which before coming in we had been led to believe was practically uninhabited. It was not easy to convey this idea to him tactfully, but after some repetition he seemed satisfied.

Our interview had been frequently interrupted by the distracting presence of a sheep, held captive by a native grass rope. Keeping it within bounds gave intermittent occupation to the retinue. The chief now told me that he had brought the sheep as a present, but it developed that he would like salt, sugar, tea and any spare chop boxes we might have in return. It was a foregone conclusion that he expected shillings as well. His ruffled dignity seemed appeased when we had given him these supplies and had served him tea in which he demanded an extra amount of sugar.

In comparison with other places in Kenya and Uganda, it seemed that a Kamasia sheep had a very high value. The native exchanges one sheep or goat for one sixty-pound bag of posho or mealy-meal. As the sack of meal usually sells at a duka for five shillings, that establishes the price for a sheep. Inasmuch as the Swahili traders who carried the posho into this valley demanded ten shillings for a load, a Kamasia sheep therefore brought twice the customary price. As the sheep presented to me by the chief was large, the interpreter suggested that the least I could offer for it was twelve shillings. I paid the price and the old chief counted his shillings carefully.

When we again needed meat for ourselves and the boys, I sent

to the chief for a young animal. This time the interpreter announced that the price was again twelve shillings. Bill protested, telling him that the large sheep had cost twelve shillings and that this one was small, in fact only half grown. The unanswerable argument was that it would some day be a big sheep and that it was worth that amount to them. The Kamasia, like all other natives I saw in Africa, love to bargain and to spend half a day haggling over a small transaction.

In reply to the chief's suggestion that I should come to him for anything I required, I told him that my greatest need was more porters. Already the problem of moving our camp back to our motors was worrying me considerably. I could not forget how pitifully the Kamasia boys had struggled along as they portered us in, even after the loads had been reshaped for them. My request for more porters disturbed the chief. Some of his men may have been thirty years of age, others forty, but they all called themselves 'mzee.' He told me that all his available men were now working for the District Commissioner at Eldama Ravine; that only the women and children and a few very old men were left to look after the flocks; but that with effort he might secure two more porters for me.

Subsequently, the old chief paid me several visits to discuss the subject. On the second visit, he said he thought he could produce six men who would be willing to go on the short trail to the Evans farm and back again. On the third visit he asked me to set the day for my departure. His daughter was to be married and he did not want the duties of the porters to conflict with the wedding. His promises of assistance were so indefinite, that I decided to send to Nairobi for porters. Accordingly, I dispatched a runner with a letter to Mr. Evans asking him to forward by runner to Nakuru an inclosed telegram to Mr. Leslie Tarlton in Nairobi. I requested him to recruit and forward to me twelve porters in care of the District Commissioner at Nakuru. To the District Commissioner I sent another letter requesting him to send a guide with the porters to Mr. Evans who in turn would send them

on to me. Three weeks later when Leigh had finished the background and color notes of the vegetation and we had completed our collection of accessories, these East African boys arrived in proper time to carry our belongings out of that over-heated, alkaline valley.

. . . . .

As a photographic expedition this journey in the eye of the sun still suggests to me, reinstated though I am in the temperate zone, a drama of misadventure. Out there it was high tragedy. Through a mischance my best photographic plates were ruined, but sight and sound impressions that no camera could ever catch were indelibly recorded in my memory—impressions that compensate for the hardships of that arduous journey.

The opportunity to make the photographs my husband had so keenly wished had presented itself on our way in with our first glimpse of Lake Hannington. The reddening sun, brilliant in that hot climate even just before its setting, shed a favorable light over the thousands of flamingoes.

"If I work quickly," I thought, "there is just time before the sun sinks to set up the cameras and make my exposures." I looked for my cameras. My East African boys, who carried them, had heretofore always kept pace with me. Now they were nowhere to be seen. One or two stragglers, who finally caught up with us, reported the camera boys resting five miles away at the last shade and water. They had given every indication of following us, until they had gained our confidence in their good intentions. Then the heat of noon had shattered their morale and unknown to us they had gone back to wade and wash in the river and sleep in the luring shade. Just as the sun dropped behind a pile of black clouds—the only clouds we saw at Lake Hannington—and, for that day at least, rendered photography impossible, the miserable recreants arrived. I was disappointed and heartsick at the lost opportunity, but I now confess to a certain understanding of the idlers. Poor creatures! Coming from our long stay in



the cold mountains of the Congo to this heat, they had been completely undone.

Three weeks later, when the painting and accessories were complete, the flamingoes were still unphotographed. After my photographic failure on the way in, Bill's blessed optimism had led him to encourage me to hope that the birds would come to the southern end of the lake, but this they had not done. There was therefore nothing for me to do but to go again to the northern end of the lake and thence to the Lower Molo—in fact to repeat our fifty-five mile journey.

Two days' tramp in one brought us to large flocks of flamingoes. Now my camera boys could not have behaved better. They were right on my heels, perhaps recalling the unpleasant rewards I had promised them for any repetition of their offense. But, judging from their many little childish attempts at assistance, they obviously remembered that my feet had not yet healed, and were ashamed that I was compelled to limp back over all those extra difficult miles. The flamingoes were at close range, and I secured excellent photographs, using all my loaded plates and films in all three cameras. Afterwards for more than an hour, at sunset, I sat on a little grassy hummock, with my back propped against a rock, and watched myriads of flamingoes coming in from everywhere and settling down into these feeding shallows at the head of the lake, with low-pitched, but continuous murmurings. All at once their muttered complaints reached a full crescendo, as two huge white birds, one after the other, dropped into their midst. I looked skyward and saw that they were just the vanguard of a great bevy of white pelicans high up in the heavens. As I watched, the air became dark with them and pulsed to the muffled drum-like beating of their wings as they settled on the margin of the lake or aquaplaned into the flamingoes' feeding grounds.

In high anticipation of securing not only flamingo but pelican photographs the next morning, I came into camp, intending to

change my plates and films as soon as it became dark, and turn in early for a long rest. Raddatz, who was making the journey out with me, reported that three porters' loads were again missing. They proved to be my tent and my camera film boxes. The most probable explanation of their disappearance was that the native Kamasia porters who carried them had taken a short cut over the mountain to the river of seductive shade and coolness where the shirkers had rested on the way in. The same boys had not failed me twice, that was sure, but this last *impasse* seemed a little bit too much. I would rather not recall how badly I lost my temper, but I do remember that what Bill and I said to the Kamasia headman put him into immediate action. He started off with a lantern and a clear understanding that something very unpleasant would happen to him if he returned to camp without the stragglers, and my camera supplies.

It was pitch dark when I finished helping my tent boy prepare our supper. He was a strong, willing young Wanyamwezi porter who did not know a word of English, but who in nearly a year of service had achieved merit, and whom, a month before, I had elevated to the rank and pay of tent boy. He carried his load with the others so smilingly and willingly that it was easy to forgive him his ineptitude at the task of preparing a meal entirely on his own account. I had left the cook behind to pull the rest of the show across the short cut to the Lower Molo, and to look after the needs of Leigh who was that day completing his study for the greater koodoo background at the top of the Escarpment.

At nine-thirty supper was over and Raddatz turned into his tent. My cot was set up in the rocks—there was no spot six feet square clear of them—and it had a small canvas fly thrown over a rope as a shelter. There was no water for a bath—only a very little to drink. I took off my heavy boots and dressed the blisters on my badly punished feet. Putting on clean white woolen stockings and my soft mosquito boots, I went out and sat in my canvas chair by our little folding dining table, to rest a little after a day that had begun eighteen hours before.

The enveloping heat-haze was slowly diminishing. The mercury had dropped to about eighty. The new moon had long since set. The Kamasia porters had finished cooking and eating their suppers of mealy-meal. After grumbling among themselves a little at my strictness in sending their neapara for the three missing porters, and in holding them in this unholy spot, instead of camping at the river as they had hoped, they had reluctantly quieted down and gone to sleep among the sun-heated rocks. Their fires had burned out save for an occasional spark that floated upwards into the velvety blackness of the African night. The stars glowed faintly in a sky so infinitely remote that only now and then a ripple in the lake caught and reflected a tiny gleam of light.

We had traveled all day through this wildly desolate section of the Great Rift and had heard scarcely a sound—only occasionally the faint tinkling of native sheep bells, and echoes of the minor sing-song of a Kamasia herder as he gathered his flock together. Twice we had found ourselves in the midst of many sheep tended by half a dozen natives and had had not the slightest sound warning of their proximity. Here, while the sun blazes its path through the sky, the valley endures in silence. But now that darkness had fallen and the heat had abated, the whole world suddenly became vibrant. I alone of all the twenty souls in camp remained awake to listen, and I was so awake and aware that the voice of every insect, bird and beast indelibly impressed itself upon me.

Certainly there was something not terrestrial in these sounds. Except for a few rare spots such as this our Earth is entirely a man-infested Earth—an Earth composed of man-made places, sounds and laws. Here it was all gloriously man-neglected. Here since the chaos of old, the abyssmal conflagrations have smoldered. When the Great Rift was in the making they broke their jagged, hostile lava mass, in the wide depression between the walls of the encompassing escarpment; here, a few rods from where I sat, the subterranean fires still bode their time, and, as if in warning of what might yet occur, a boiling river spilled its stifling, gaseous

waters into the fetid lake. And it seemed to me that this neglect by man was perhaps full reason for this all-pervading newly awakened life, as invisible and inaudible as if absent throughout the day, but now pouring its heart into the friendly darkness of the night.

In the beginning, as I rested my exhausted mind and muscles, I only knew that the world was speaking. Little puffs of wind wafting to me the incense of the porters' dying fires, rustled parched leaves in the almost naked thorn scrub, or stirred the tiny tufts of sun-yellowed grass, fighting for life in the crevices of the rocks. Then I suddenly became aware that I had entered a great theater of sound. Countless crickets were chirping shrilly with reedy little voices, just as they do at home on hot August nights. Myriad other insects in different and variant keys, gave forth incessantly tiny wisps of sound, as the bow touches lightly but raspingly the E string of the violin when tuned to its highest pitch. Away back in some forgotten place floated other voices, shy and intermittent, like the night-twitter of birds in spring.

Occasionally I heard the desolate cry of a wild goose, one of a pair which had floated in a near-by cove at twilight. Had he lost his mate to some nocturnal marauder? Had she made a toothsome morsel for some hungry crocodile?

From a clump of near-by scrub came a succession of quick, short grunts and a sudden stampede. Perhaps a preying jackal had got into a row with mother wart hog in an attempt to take one of her little ones. In the late afternoon we had seen near-by the comical looking family, mother and five little ones, all with stubby tails on end, trotting valiantly up a steep incline ahead of us, each little 'wart piggy' doing his level best not to be left behind. From time to time came the disturbed plaintive murmurs of flamingoes, or the pulsating beat of heavy wings as the pelicans flew in long lines low over the lake in search of other resting grounds.

Back in the rocks came insistently and repeatedly the guttural snorting half-whine, half-roar of a hungry leopard, as he prowled





*Photo. by Carl Akley.*

MYRIADS OF PINK FLAMINGOES SETTLE DOWN INTO THE FEEDING SHALLOWS AT THE  
HEAD OF LAKE HANNINGTON.



*Photo, by Carl Akeley.*

AT SUNSET A FAMILY OF HIPPOS CAME TO THE MARGIN OF THE LAKE.

about a native manyatta or sheep pen, intent on his midnight meal. It was a comforting feeling to know that Bill and the .475 were not too far away.

But the most primeval and therefore the most amazing sound of all was that of the hippos in the lake. It is only where this primordial beast lives a life free from molestation that he is a noisy creature and his unfamiliar utterances occur in the night. That evening just at sunset a family of hippos had come quite casually to the margin of the lake near my improvised tent, and there they floated, and swam, and lumbered and puffed about. They posed for ten full minutes for my camera, and then quickly vanished into the depths. Now the whole lake seemed suddenly alive with these colossal amphibians, giving vent to indescribable grunts and puffs and snarls, different in quality and volume from the voice of any other animal, and I think the most alien sound I had heard in this foreign land. Their voices reëchoed harshly along the whole length and depth of the escarpment wall. And interspersed with these noises near at hand, I could hear another group of hippos on the opposite shore climbing among the rocks in search of forage, and dislodging an occasional boulder which fell rebounding to the lake. Their feeding finished, one by one these fabulous river horses plunged again into the water, grunting with increasing volume and snorting not unlike terrified stallions.

Perhaps the most astounding and impressive element in this midnight overture was the wave-like recurrence of the outcry of the night. Great floods of sound lasting five full minutes, as if the leader of all the orchestras in the world brought his tens of thousands of players to a full crescendo, were followed by shorter periods of absolute silence. Then the outpouring broke forth again and was again succeeded by the stillness of oblivion.

I must have stayed in this world of long ago for nearly three hours. It was well past twelve o'clock when I heard the footsteps of the missing porters among the rocks and caught the gleam of the headman's lantern as he held it high to light the way. They dropped their loads and without a word glided past



me to their sleeping companions. I changed my camera plates, and half an hour later, went to my belated rest, closing my ears to the outflow of the tropic night.

The next morning I made excellent exposures of flamingoes and pelicans with both large and small cameras. Well satisfied to have secured these photographs at last and with them to have concluded the expedition's work in the Hannington region, I prepared for our departure.

Back in Nairobi, a thousand details awaited my attention. The outfit was to be disposed of, an exhibit of the expedition's paintings arranged,<sup>1</sup> our collections packed for shipment, passage for members of the party secured, customs officials interviewed. No time remained for me to develop my own negatives as my husband and I had done in the field. To secure the best results, prompt development was desirable and so I entrusted my precious films and plates, most of which were panchromatic, to a well recommended Nairobi photographer. As a sequel to their story, he made the mistake of using a ruby light in their development and many of the best negatives were so fogged as to be practically useless!

I suppose their loss is not irreparable. Others have photographed and will photograph the flamingoes of Lake Hannington. But had I not persisted in the attempt, I could not now have stored in my inner consciousness, beyond any chance of effacement, a vision of that strange inland lake as it lay that night, a sheet of black under the towering walls of the Escarpment silhouetted nakedly against the star-sheen of the sky, and even more enduring, the reverberation of that nocturnal symphony which emanated from the very soul of age-old Africa.

<sup>1</sup> In accordance with the wish of the Governor, Sir Edward Grigg, and in fulfillment of my husband's promise, I arranged before my departure for America an exhibit of all the paintings of the expedition. As the Governor was home on leave, the exhibit of eighty-four canvases was opened at the Legislative Hall in Nairobi by Acting Governor Sir Edward Denham, to whom we presented a landscape of the Athi Plains with Mount Kenya in the distance, as a gift for Government House, Kenya Colony. His opening address, the attendance and the comments of the press all indicated that this exhibit was a revelation of the beauties of Africa.



## CHAPTER XXII

### FAREWELL

FOR the last time I stood on the Nairobi station platform. My luggage Bill had stored away in my little hard-cushioned compartment on the dusty train. Once again the motley, swarming scene! Rushing, shouting, burden-bearing Orientals and natives fought for places in the crowded carriages ahead. Groups of 'fortunate' ones were going home on leave—scores of 'less-lucky' were there to say good-by. Dear, loyal friends, whose understanding and whose steadfast faith in me had made this last month possible in the town, pressed round me to say Godspeed. Our talk was casual and interrupted by the things we could not say. My black boys—a dozen of them signed off a week before from the year's safari—stood dressed in their Sunday best—a solid mass to see me off. The station bell rang long and loudly, cutting off completely every other sound. I stepped aboard. The guard slammed the door—the waving, shouting train moved out. Blayne Percival on his way to his Machakos estate sat with me. I was grateful for that hour of his companionship, for the presence of this friend of Carl's and mine whose 'worth was ever warrant for his welcome'—for that brief and slender thread still binding me to Africa, now wild and beautiful in an electric storm. As the train drew into Magadi Junction and Percival climbed down, the yearning earth was deluged by the driving rain. I can see him yet—valiant hunter—soldier in many wars and climes—his head erect, his kindly, rugged face shining as he waved farewell and faced the drenching storm. The wind whipped across the veldt; the now distant thunder boomed faintly and faded out. And as I saw but dimly through my misty eyes the sheets of rain driving up and down across the ever shifting scene, it seemed to me that all the fonts of heaven

were breaking over the parched and aching heart of Africa and over my own desolate and suffering soul in a merciful baptism of tears.

. . . . .

Our ship was under way. We had cleared Mombasa harbor. That little spot of black I had watched so long—Bill in a red dhow, shoreward bound—Bill smiling and cheering and waving me farewell to the last, had finally mingled with the glowing sea. The one familiar fragment of the past had faded like a dream. It was indeed farewell. Soon twelve thousand miles of ocean would separate me from the land I had grown to cherish—from the land which for more than a year had borne witness to imperishable dreams and accomplishments and friendships and love—to the eternal motive that drives men on. Now, I was leaving Africa as we had entered, under the benediction of the sun.

Again the 'day star' slowly glided down the western sky, suffusing the great continent in the witchery that never fails to lure the wanderer to return. I stood by the rail watching it gild the broken, palm-fringed shore line, rising black and jagged from the reddening sea. I knew the great orb was rolling on, enveloping in magic the hinterland.

Suddenly, I seemed no longer on the ship. I was back again in the country I had unwillingly left behind. As if portrayed in a series of shifting canvases against a wall of gray, I saw again the high spots of our experiences in sharp contrast with the somber days of loneliness and toil. Again I saw the flower-filled meadows circling the rocky kopjes high above the Athi and the graceful leaping antelope that linger there; the northern desert, red with dawn, and herds of prehistoric, voiceless ungulates that crop the sweet and thorny herbage of the veldt; the golden, far-extending swales below Mt. Kenya's icy peak, where silvery herons show where wild and wary cattle hide; the rolling plains and shaded dongas, spreading eastward in unbroken vastness from Tanganyika's inland sea, where peaceful lions play and



*Photo. by Mary L. Jobe Akeley.*

AFRICA!





herds of gentle antelope travel ever onward seeking grass; the Great Rift, cleaving as a gigantic trench the central high plateau, in whose depths a turquoise, saline sea, decked with fluttering fowl like billows of pink foam, lies fervid in the sun.

And beyond it all in the very heart of Africa I saw a land in rare degree made fair by God—a land with gift of peace for shaggy man-like beasts that long have called that spot their home. I saw the ward for them throughout the ages yet to come—the sanctuary a gentle, reasoning mind had planned; I glimpsed the lode of wealth for science, through the perpetual truce made certain by a gracious sovereign who himself had borne the scar of dreadful war. I gazed again on that primordial land—its volcanic mass, its widened vents, its billowing wald, its rain and sleet and sunset glow. I saw it all again, the 'fairest spot on earth'—a temple in the uttermost, on whose high altar a devoted sacrificial spirit had offered up the total of the man he was.

And as I gazed, the pall of darkness swiftly crossed the fading sky, wrenching my soul back to the enigma of the hour. A freshening, off-shore breeze brought perfumed presage of the waiting night. And with it came a message to my heart—I knew that Africa would never cease to call—I knew my work had only just begun—throughout the years, in every task my eager hands might grasp, I would keep faith with him who ever had such trusting faith in me and in all the steadfast family of mankind.

## APPENDICES

### APPENDIX A

#### AKELEY, THE CONSERVATIONIST

AT the Akeley Memorial Meeting held on December 21, 1926, at the American Museum of Natural History, Baron Emile de Cartier de Marchienne made the following remarks: <sup>1</sup>

"For many years Carl Akeley has been one of the leading conservationists in America. He was one of the charter members and also a member of the Board of Directors of the John Burroughs Memorial Association which has done so much for the conservation of bird life. He took a prominent part in forestry conservation, notably in the conservation of the great Redwood trees. He was a very active member of the National Parks Association and an influential promoter of their ideals, namely, to preserve nature and win all America to its appreciation and study; to promote the use of national parks for popular education and scientific investigation; to protect wild birds, animals, and plants, and to conserve typical areas under primitive conditions.

"As an indication of his varied activities for conservation I may mention that he was an active member of the New York State Forestry Association, the American Scenic and Historic Preservation Society, the National Audubon Society, the Roosevelt Memorial Association, and other similar associations. In all of these societies, Akeley was more than a member, he was a leading spirit, and in his lectures, in his books, and in his numerous articles, he earnestly and effectively pleaded the need of conservation.

"The movement for conservation in America, in which Akeley

<sup>1</sup> Reprinted through the courtesy of *Natural History*.

has played so great a part, has found a hearty echo in Europe and especially in those countries which have tropical colonies, where animal life still exists in its natural environment. In this connection I may mention the work now carried on by the Belgian Cercle Zoologique Congolais, under the presidency of Doctor Derscheid of Brussels, who is at the present moment in Africa, where he saw Akeley a short time before his tragic death. I should also mention the activities of the Nederlandsche Commissie voor Internationale Naturbescherming which, under the very competent guidance of Mr. P. G. van Tienhoven, of Amsterdam, has inaugurated an international movement for conservation.

"During the last years of Akeley's life it was my great privilege not only to have the pleasure of his personal friendship, but also to be associated rather closely with him in our efforts to preserve the fauna and flora of the Belgian Congo.

"Akeley, like Saint Francis of Assisi, had a great and kind heart, full of sympathetic understanding for 'God's humbler creatures.' Although he was counted 'a mighty hunter,' he never killed for the sake of killing. He could kill wild beasts for protection, for food, or for the legitimate purposes of science; but his soul revolted against the wanton destruction of innocent animals or rare species whose conservation is necessary for scientific study.

"As he told me, Akeley, during his trips to Central Africa, became especially impressed by the brutal slaughter of the gorillas by so-called 'sportsmen' who destroyed these inoffensive animals for no other purpose than to boast of a bigger bag than rival hunters. Akeley had discovered in his rambles that a few hundred gorillas had taken refuge in the Kivu District, and when King Albert decided that a sanctuary for the fauna and flora of those regions should be created there, no one greeted this idea more enthusiastically than our friend.

"No doubt King Albert, when planning this sanctuary which is called Parc National Albert, was influenced by his past ex-

periences when he traveled far and wide in this country. The main idea of His Majesty is that the flora and fauna be maintained in their natural surroundings so that they may be studied under the most favorable conditions by the reputable scientists of the present day and of future generations. The Parc National Albert, in which Akeley was so interested, now embraces the three volcanoes, Bishoke, Karisimbi, and Mount Mikenno. In the creation of the Parc National Albert we have had the constant advantage of Akeley's experience, as well as the most valuable collaboration of Doctor Merriam, Doctor Osborn, Doctor Hornaday, and others.

"Before sailing on his last fateful journey to the Congo which he loved so well, Akeley was received in Brussels by King Albert, who explained to him at length his views on the organization of the national park named after His Majesty. Alas, death has prevented Akeley from accomplishing his design to follow the river Congo to the sea, as did that other illustrious American, Henry Stanley, nearly fifty years ago. He would have seen with his own eyes the wonderful development achieved since that time and often against almost insuperable obstacles through Belgian efforts in Central Africa. This sanctuary of fauna and flora so dear to Akeley's heart will be one of the resplendent gems of the Colonial Crown which Belgium owes to her great and far-sighted sovereign, Leopold II.

. . . . .

"Akeley died on the slopes of Mount Mikenno in the Belgian Congo in the midst of the 'Sanctuary' which he had planned and which was the realization of one of his fondest dreams. His death was that of a happy warrior who dies on the field of duty in the struggle for the betterment of the world. Although he was not spared to see the full realization of all his ideals, he knew that the victory was won. As he himself once said: 'The slowest and most laborious stages of preparation are now past; the future will show concrete results.'

"He laid down his life in a great work, not only for his fellow



men but for all his fellow creatures. When he closed his eyes on Mount Mikeno, he must have had the supreme satisfaction of knowing that he had achieved success for his cherished ideals, and that the work he had accomplished would be an enduring benefit to the whole world.

“What Akeley has done will leave a lasting mark on the activities with which he was associated. His achievements in the realm of science and in the domain of art, his work for the conservation of animal life, will live after him, and will be to him a monument more enduring than any that could be raised by the hand of man. His memory will ever be in our hearts and will be an inspiration to those who come after him to carry on the work to which he devoted his courageous life and to fulfill the high ideals which he has set before us.”

At a General Assembly of the *Société pour la Protection de Nature*, held in Brussels, July 9, 1927, Carl Akeley was posthumously elected an Honorary Member of that Society ‘as a mark of appreciation of his eminent and distinguished services to science and to the work of conservation.’

## APPENDIX B

### MAKING A MUSEUM GROUP

A MODERN museum group consists of four parts: first, the artificially lighted exhibition case with glass front; second, the animals mounted in life-like attitudes; third, the plastic foreground in which rock, soil and plant accessories combine to reconstruct the animal's natural habitat; and fourth, the background, a painted canvas blending almost imperceptibly with the foreground and curving to meet the glass front of the exhibition case so that an illusion of great space is created. Daily hundreds of men, women and children, thronging the museum

halls, marvel at the reality of such groups, but scarcely one among them has any conception of the detailed study which the taxidermist must make of the habits of the animal illustrated, the painstaking methods by which he preserves and prepares its skin and skeleton, and the records which he is required to take in the field before the construction of a taxidermic group is possible.

Taxidermy, when Carl Akeley decided as a young boy to make it his life work, was the simplest of crafts. Specimens were stuffed or upholstered in those days; mounting was still unthought of. A skin was dried, hung upside down, crammed full of straw or rags, and, if it bulged offensively in spots, thinned by being drawn together with a long needle and stout string.

In 1926, when, as his wife, I accompanied Carl Akeley to Africa on his fifth scientific expedition, taxidermy had been revolutionized. His experiments, extending through a quarter of a century, had created a new art that resembled the old taxidermy in name only. Taxidermic grouping had been introduced into museum exhibition, so that the mounting of the animal was only one of the many points to receive attention. The selection of a typical setting to be painted as a background, the reproduction of the animal's habitat, and the practical and artistic problems of lighting and case construction complicated my husband's work immeasurably.

His perfected taxidermy had already resulted in the installation of a number of museum groups that were scientifically accurate, amazingly natural, and artistically satisfying. As he contrasted them with the efforts of his immature years, he felt a just pride; yet such detached examples of his art seemed to him but fragmentary. He was dreaming of a complete exhibit that should be the embodiment of all the refinements of the new taxidermy—of a series of thirty-six interrelated taxidermic groups, housed in a specially designed museum hall, which should actually recreate untouched Africa in America. According to his conception, the foregrounds of plant accessories of these thirty-six groups will

furnish a compendium of the African flora. Their backgrounds, painted in Africa, will summarize the topography of the continent. In addition, these groups will present a synopsis of African fauna, for each will exhibit specimens of the animals to be found in the locality portrayed.

I have already stressed the importance which the Akeley-Eastman-Pomeroy African Hall Expedition took on, in view of the rapid extermination of African big game. Because this expedition permitted my husband to take an adequate corps of assistants into Africa for field training, thereby setting in motion machinery that would carry to completion an undertaking too great to be accomplished by one man alone, it had for him a further significance.

In organizing the work of his party for this African Hall expedition and others to follow, my husband once wrote:

"The field work involves the survey of the continent from East to West, and from North to South, as it is proposed to give in the backgrounds—forty great paintings—a comprehensive idea of the topography of Africa. The director in charge of the African Hall will be practically resident in Africa, engaged in planning the groups, selecting locations to be depicted, studying the life history of the animals to be represented and directing the field work. When the director has chosen the region which is to be depicted as the habitat of a given species of mammal, there will go to him from the studios at the museum a small force of men, to include a painter to make studies for the background and a sculptor-taxidermist to secure and prepare the specimens and accessories. These men will return to New York with the material for two groups which they will proceed to prepare for exhibition, doing the work while the material is fresh and their minds clear as to the results to be worked for. While this first group of men is busy with the preparation of their material a second similar group of men will join the director in another region of Africa to secure material for two more groups. Thus

the two groups of men will alternate in their journeys to Africa, making up their material as fast as collected. Obviously this plan should make for freshness and freedom in the treatment of each group produced and should keep up the interest and enthusiasm of the staff.

"I feel that immediate and aggressive action is necessary. Africa has changed rapidly in the past twenty-five years and is changing even more rapidly as time goes on. The men who knew Africa twenty-five years ago have a good conception of Africa before the invasion of modern civilization; and those men are growing old and few. The men who can do the African Hall as originally planned are here now—but ten years from now will be too late."

My husband's plan for alternate work is being carried out by his former pupil and museum associate, James L. Clark, now Assistant Director of the American Museum of Natural History, who at all times has shown great loyalty to the Akeley methods and ideals. While Rockwell and his fellow preparators in the museum were assembling the groups, materials for which we obtained in 1926, Mr. Clark recently returned to Africa where he made further collections for African Hall. As the African Hall work has progressed, both preparators and artists have expressed their appreciation of the inspiration that Africa gave them and their belief that Carl's idea of bringing his aids into contact with the country itself is one that will survive. The African paintings of Leigh and Jansson are significant not only as aids in natural history exhibition but also in the field of art.

Carl's first step in caring for a natural history specimen in the field was to make full photographic records. Using a stereoscopic camera, he made camera studies of the animal as a whole, then of the various parts of the body—head, shoulders, flank, the delicate veining of the legs, et cetera. These photographs, when viewed through the stereoscope, are the greatest aid in giving a correct impression of the animal when it is being mounted in the taxidermic laboratory. The stereo plate shows the animal in three dimen-



sions; that is, it shows to the eye relative contour and actual modeling. The effect of solidity or relief is produced by combining the images of two pictures taken simultaneously from points of view a little way apart. It is therefore of infinitely greater value than the usual flat photograph. After the animal has been exhaustively photographed, a complete set of measurements is made and recorded on a chart, especially prepared for the purpose.

The next step is to make a death mask or plaster cast of the head and to take casts of other parts of the body. These charts and casts are invaluable in the museum laboratory. When the taxidermist is at last ready to prepare the exhibit, he first makes a clay model of each animal to be mounted. With the aid of the charts and casts he has brought from the field, he is able to sculpture this model so accurately that the tanned skin fits over the modeled bones and muscles as in life. Taking a sectional plaster mold of this clay model is the next step in the mounting process. Each section of the mold is then lined with a thin coating of glue and a layer of muslin. When the glue has dried, papier-mâché, moistened until it may be readily molded into form and reënforced by wire cloth, is worked into every undulation of the plaster mold. After the papier-mâché has set the mold is immersed in water, the glue melts, and the sections of manikin are released. Fitted together they make a perfect replica of the original clay model over which to stretch the animal's skin.

A well tanned pelt mounted on a manikin prepared by this method, which my husband developed and perfected during the early days of his connection with the Field Museum of Natural History in Chicago, possesses not only the quality of natural beauty, but also the equally important quality of permanence. Papier-mâché is light, but very durable, and when shellacked is impervious to moisture, an essential point in preventing deterioration.

This method was so much more painstaking and expensive than any that had preceded it that there could have been no justification for the expenditure of the time, money and energy involved,

if the animals it re-created in the museum were to live no longer than animals in the field. However, Carl believed that the groups he was preparing for African Hall might be expected to remain in a satisfactory state of preservation through at least two or three centuries, if afforded the care he prescribed, and that long before that time had elapsed scientists and naturalists would be forced to turn to museum exhibits instead of to Africa itself for the only existing records of species now rapidly being exterminated.

With the completion of the photographic records, the charts to record measurements and the plaster casts, the work in the field is only well begun. The careful skinning of the animal is the next step. A comparatively small incision is made on the belly and the whole carcass is removed through this single opening by dividing and cutting away the body. The leg skin is left in the round so that it may be stripped off like a stocking. Under no condition is the skin on the leg split as this would necessitate unsightly seaming; and when the skin reaches home, the greatest precaution must be taken in tanning, lest some thoughtless workman destroy the possibility of reproducing the beautiful modeling of the leg. Next the skin is scraped and fleshed, and is then hung up to dry with the fleshy surface exposed to the air. In that warm climate, a thin skin like that of the klipspringer dried thoroughly within ten hours. As the hairs are hollow and therefore very brittle, this skin is softened by hand when it reaches home and never sees the tanner's tubs. Furthermore, the carcass is skeletonized, which means that all flesh is removed and the bones thoroughly scraped and cleaned. The skeleton is necessary in the museum workshop as an essential basis in constructing the armature, which is a form of wood and wire upon which the anatomical clay model of the animal to be mounted is made.

The utmost caution must be taken in wrapping the hoofs to prevent any chafing of the skin, in handling, in packing in zinc-lined cases, in poisoning against dermesttes (small beetles which destroy skin and hair), and finally in sealing the cases for shipment. Disulphide of carbon is the poison used to destroy all in-

sect life that might injure the skins. As it is highly explosive, the skins are first packed and the covers soldered on the cases. Then the poison is poured in through a small hole which is immediately sealed with a screw cap. Each skin is indeed a treasure, as it represents hours of labor in the field. If a skin has not been correctly prepared in the field, the mounted animal in consequence is bound to show certain defects. Those who are familiar with my husband's deer groups or his African collections in the Akeley Memorial Hall of the Field Museum of Natural History in Chicago or with his elephants or gorillas in the American Museum of Natural History in New York, can perhaps understand the pains-taking care which he always exercised in the field in preparing the skins for mounting.

In order to perform this work properly, a complete set of tools must be taken into the field. They consist of various shapes and sizes of skinning knives, calipers (a tool for measuring diameters), and measuring tapes. In the curing of most skins in the field, salt is rubbed in on both the hair and flesh sides in order to extract the water, but in the case of the klipspringer, the skin is so delicate and thin that salt is not necessary. It was once my husband's practice to send skins home in casks of brine. Having abandoned this method of curing and packing, he took the greatest pains in thinning, fleshing, curing and poisoning the skins, throughout the entire expedition. In addition to the skinning tools and salt, he carried with him a large quantity of plaster of paris for making casts of both animals and plants.

In our Lukenia camp a number of sunbirds were collected. These graceful little creatures of iridescent, brilliant plumage are found frequently on the sunbird plant, a high growing teazel, with a fine display of reddish yellow flowers. In preparing these and also several larger specimens of birds, the method was first to remove the skins; then from the body, as a model, to prepare a little manikin of fiber over which the cured but still pliable bird skin was stretched. In this way, many birds were mounted in the field.

Shrubs, flowers, leaves and grasses are as essential to a modern group as the animals themselves. Once he had chosen the plants to be used as accessories, my husband directed his assistants in making plaster casts of their leaves and stems. Specimens of each chosen plant were placed in formalin, sealed, and packed as a guide in the reproduction of the vegetation. The artists also made color notes of all the botanical specimens collected. The replicas made in the museum workshop are so accurate in color, form and texture, as to give to the observer an impression of complete reality. The method of reproducing vegetation in wax was devised by my husband in the assembling of his seasonal deer groups in Chicago. His invention was subsequently recognized by other museums and the process came into general use in America.

That the various activities of his staff might be more definitely coördinated, Carl planned to prepare in Africa a small sketch model of the groups he collected. He was able to do this in the case of the Klipspringer Group. This faithful, though miniature, representation of the animals in their natural environment is now a part of a detailed model for Akeley African Hall, which has recently been made in the museum workshop as an aid to the preparation of the final groups.

As this book goes to press, the Akeley African Hall is beginning to take actual form. In addition to the nine and a half groups that resulted from the Akeley-Eastman-Pomeroy African Hall Expedition, three others have recently been planned and presented by generous friends.<sup>1</sup> Together with the groups my husband had already prepared, these gifts constitute fourteen of the thirty-six habitat groups required for Akeley African Hall. Furthermore, the City of New York has made the initial appropriation to begin the construction of the Akeley African Hall Building. This timely grant has come as a result of the untiring efforts of President Henry Fairfield Osborn.

<sup>1</sup> Group of Giant Sable Antelope from Portuguese West Africa, gift of Arthur S. Vernay. African Lion Group, gift of Mr. and Mrs. G. Lister Carlisle, Jr. Nyala Group of Abyssinia, gift of Miss Gertrude Sanford.



## APPENDIX C

RECORD OF RAINFALL IN THE PARC NATIONAL ALBERT, NOVEMBER  
AND DECEMBER, 1926, *as kept by R. C. Raddatz*  
*for J. M. Derscheid*

NOVEMBER	7 A.M.	mm.
24 to 25	" "	2.6
25 " 26	" "	4.5
26 " 27	" "	no rain
27 " 28	" "	16
28 " 29	" "	4.5
29 " 30	" "	2
30 " 31	" "	2.5

DECEMBER		
1 " 2	" "	1
2 " 3	" "	no rain
3 " 4	" "	" "
4 " 5	" "	" "
5 " 6	" "	" "
6 " 7	" "	" "
7 " 8	" "	1
8 " 9	" "	2
9 " 10	" "	7
10 " 11	" "	6
11 " 12	" "	1
12 " 13	" "	no rain
13 " 14	" "	" "
14 " 15	" "	7
15 " 16	" "	1
16 " 17	" "	no rain
17 " 18	" "	5

## APPENDIX D

TEMPERATURE IN THE PARC NATIONAL ALBERT, *taken during  
November and December, 1926, in the shade in a  
protected place*

Night Minimum  $32^{\circ}$ – $40^{\circ}$  F.

Day Maximum  $40^{\circ}$ – $46^{\circ}$  F.

## APPENDIX E

## PLANTS AND TREES OF THE GORILLA GROUP

List of native and scientific names prepared by  
J. M. Derscheid

<i>Numbers as given at Kabara camp by Raddatz, Dec. 12, '26</i>	<i>Native names in Kinyaruanda</i>	<i>Latin Names Family</i>
1 (Hanging Fern)	Sharânda	Polypodium excavatum Family—Ferns
2 (Large Dock)	Muko	Rumex nepalensis (Steudeli) Family—Polygonaceae
3 (Nettle Vine, pink blossom)	Rukembagufa	<i>Not yet determined</i> Family—Labiaceae
4 (Wild Rose Tree)	Musungura	Hypericum lanceolatum Family—Hypericaceae
5 (Blackberry)	Mukeri	Rubus runssorensis Family—Rosaceae
6 (Coarse Celery)	Kisengosengo	Anthriscus sylvestris Family—Umbelliferaceae

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7 (Round Stem Vine)	Rubunânga	<i>Not yet determined</i> Family—
8 (Ground Vine, begonia-like)	Mutondori	<i>Impatiens</i> sp. (several sp.) Family—Balsaminaceae
9 (Moss Table Plant)	Kibarebare	<i>Not yet determined</i>
10 (Palm Leaf Tree)	Ndômvu	<i>Lobelia</i> (probably <i>gibberoa</i> ) Family—Campanulaceae
11 (Paper Bark Tree)	Mugêshi	<i>Hagenia abyssinica</i> Family—Rosaceae
12 (Maiden Hair)	Nyarubânda	<i>Thalictrum rhynchocarpum</i> Family—Ranunculaceae
13 (Sticky Vine)	Rukarara	<i>Galium spurium</i> Family—Rubiaceae
14 (Hanging Vine, yellow blossom)	Ruhungangeri	<i>Sedum Meyer</i> Johannis Family—Crassulaceae
15 (Curly Dock)	Kitamatama	<i>Senecio</i> sp. Family—Compositae
16 (Slender Bushy Dock)	Kifuranindi	<i>Not yet determined</i>
17 (Fine Celery) (Medium Celery)	Kisengosengo Kihunga muy- aga	<i>Anthriscus sylvestris</i> (same as No. 6) <i>Peucedanum Kerstenii</i> Family—Umbelliferaceae

## NATIVE NAMES OF PLANTS AND TREES AS GIVEN BY MGURU

Wild celery, coarse, fine and feathery—KISENGO-SENGO

Wild rose tree—MUSUNGULA

Paper bark tree—MOOKAZE

Blackberry—MOOKALE

Begonia—MOOTUNDORE

Nettle—KAGARA

Round stem vine with yellow flowers—KANYA MAGANZA

Rough dock with yellow flowers—KETAMATAMA

Red vein dock—MOOKOO

Slender leaf palm-like plant; a tree parasite, also found on ground  
—'NDONVOO

Broad-leaf, palm-like plant—MUILOOMBA

Broad leaf, dark shiny leaf; a tree parasite, also found on ground  
—KEBALI BALI

Small leaf green vine with small yellow flower found hanging  
from moss and trees—KEARANDA

Sticky vine—LUKALALA

Tall green plant, fluffy yellow flower, slender dock-like leaf—  
'MBATUROO

Maiden hair fern—KA HUNGA MOOYAZA

Heavy black fern—KASHERE

Gray beard trailing moss—SHALA 'NKEMA

Ground vine plant, lavender spike flowers—BOONVO 'MPENE

Laurel, dark color—MOOSUNGATI

Laurel, light color—MOOMBA

Thistle—KEEGEMBE GEMBE

Bamboo—MEEGANO



## GLOSSARY

*askari*, soldier, policemen

*baksheesh*, gratuities

*banda*, shelter

*barua*, pass, letter, bill

*bas*, enough, that will do, stop

*boma*, stockade, fence, fortress, hedge

*bwana*, master

*chumvi*, salt

*dawa*, medicine

*dhobes*, laundrymen

*dhoti*, loin cloth

*donga*, gulley

*duka*, shop, trading post

*el moran*, warrior

*ghi*, drawn butter

*gonjwa*, sick, ill

*hema*, hut, tent

*jambo*, a greeting

*kapendi*, employment paper

*kelele*, noise, tumult, clamor

*kondoo*, sheep

*kubwa*, big

*kuku*, chicken

*kwenda*, to go to

*manyatta*, a stockade or pen for cattle or sheep

*mazuri*, good

*memsabib*, mistress, madam

*mimi*, I, me

*mingi*, many

*mpishi*, cook

*mzee*, old man

*neapara*, headman

*ndiyo*, yes

*okuri*, he is dead

*panga*, ax, sword, native knife

*posho*, daily ration, food money or allowance of provisions

*quaheri*, good night, good-by

*rugano*, bamboo forest

*rugeshi*, cold forest

*rutiti*, sub-alpine zone

*sabuni*, soap

*safari*, noun; outfit for travel in the field, including equipment  
and native employees

verb; to make a trip or expedition into the field

*sahib*, master

*sana*, a great deal, very, much

*santa*, thank you

*shamba*, field, garden, plantation, cultivated ground

*shauri*, conclave

*simba*, lion

*toto*, baby, young

*tui*, leopard

*twiga*, giraffe

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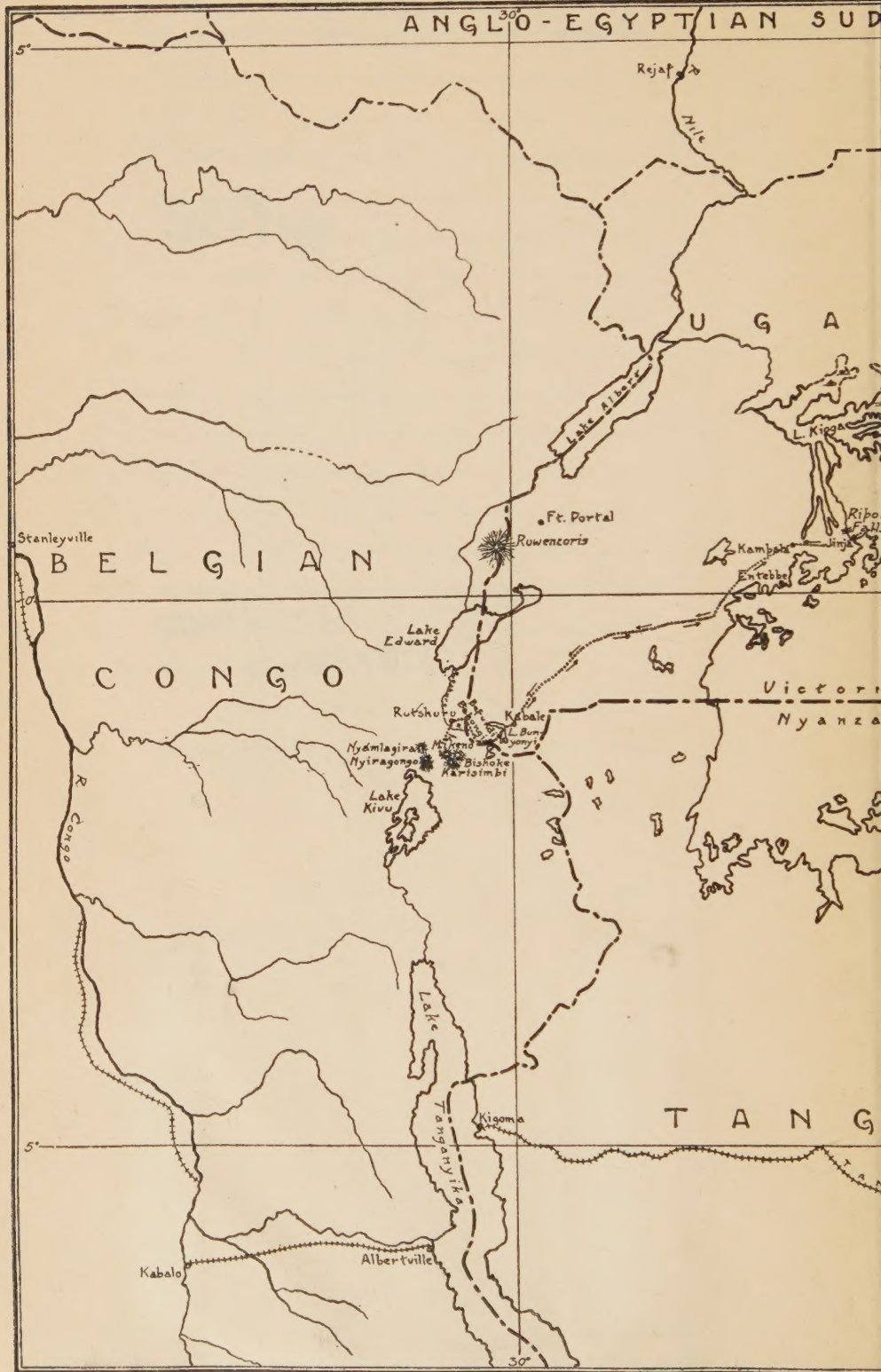
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